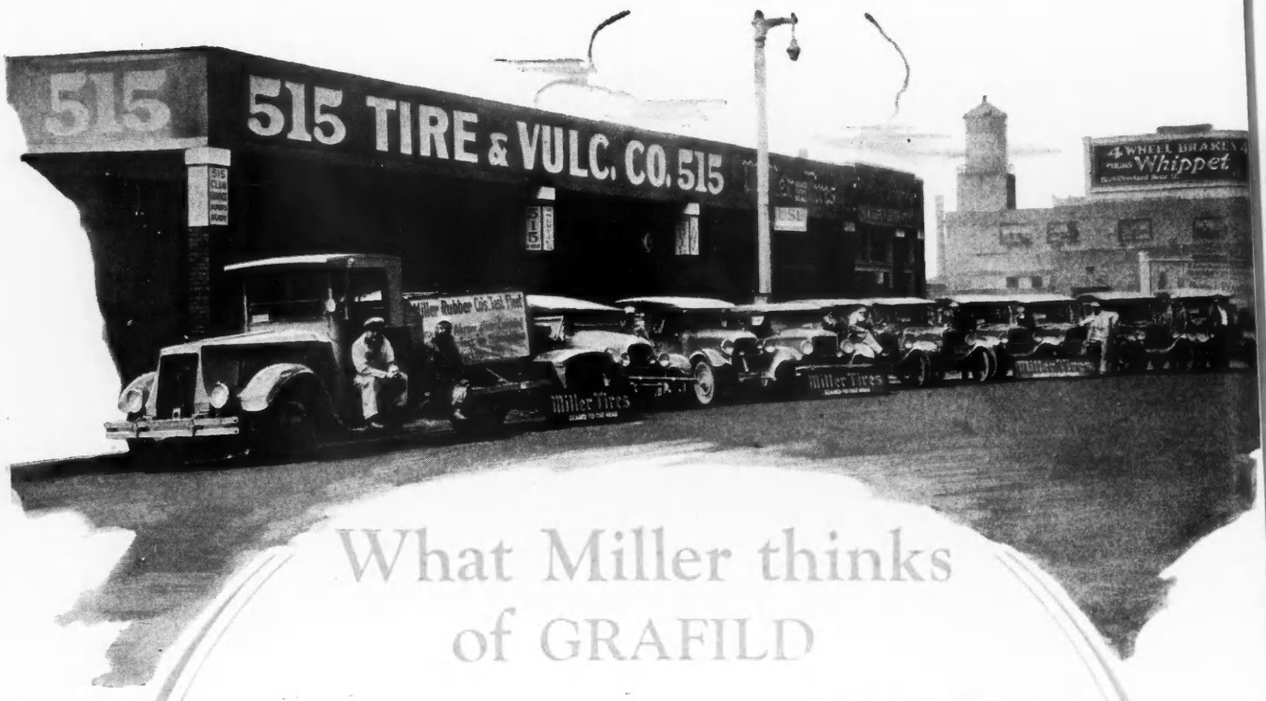
COMMERCIAL CAR JOURNAL

and OPERATION & MAINTENANCE

MARCH 1929



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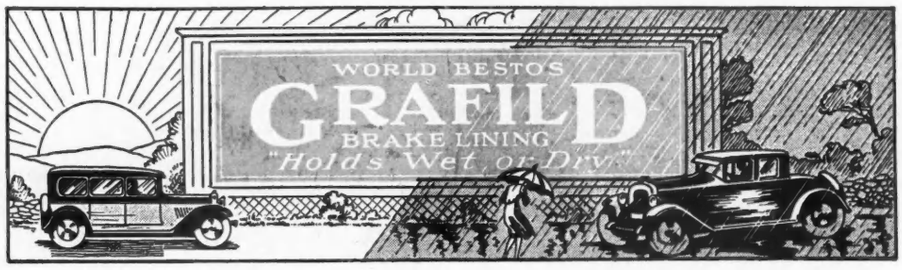

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COMMERCIAL CAR JOURNAL
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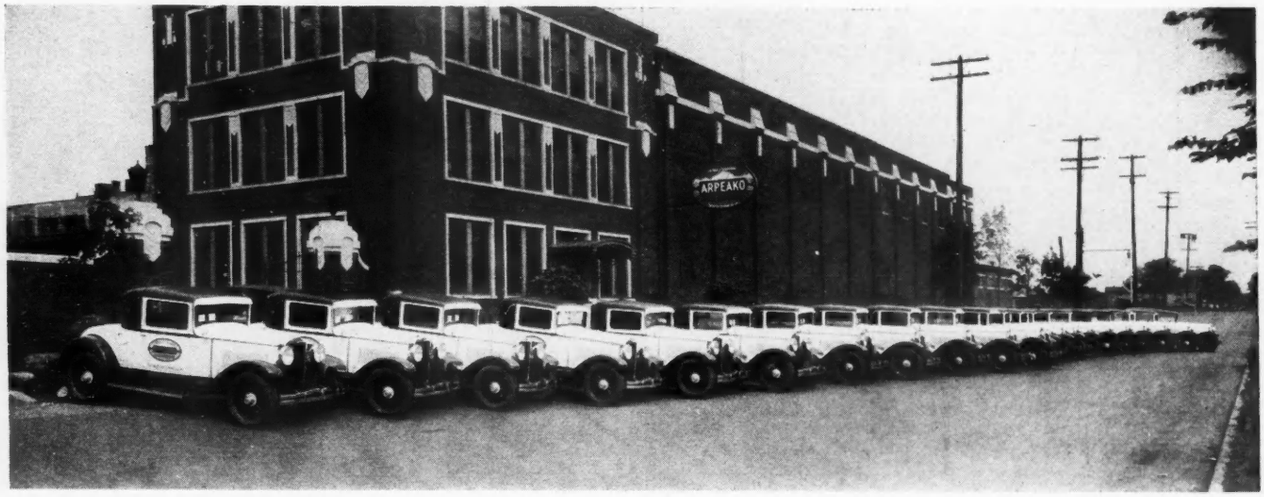
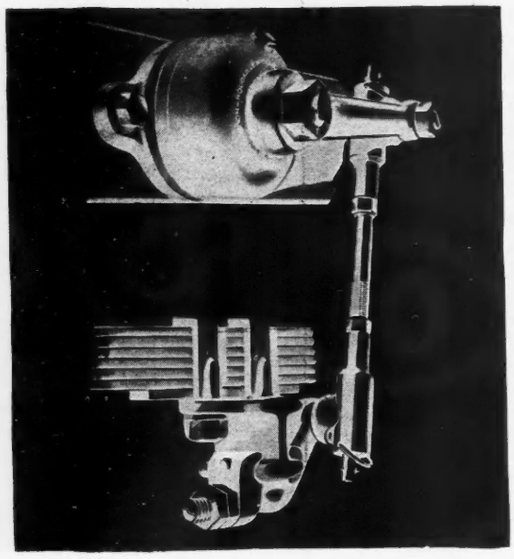


The Rochester Packing Co. wouldn't equip this fleet with HOUDAILLES *if it wasn't Profitable*



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VOL. XXXVII

COMMERCIAL CAR JOURNAL *and* OPERATION & MAINTENANCE

NUMBER 1

PHILADELPHIA, MARCH, 1929

HIGHWAYS and steel tracks—furnishing the means of travel for trucks, and freight and express trains—in one way combine to form a system of coordinated transportation meeting the exacting requirements of modern social and business life. In another way they are competitive arteries of transportation. Shippers are confronted with the problem of determining which, under certain conditions, is the more economical. To arrive at comparative costs of the various transportation media, an analysis should be made. On pages immediately following shippers and operators are furnished a practicable method of analysis.

FREIGHT? EXPRESS?

A Comparative Study of Transportation Costs

A NUMBER of comparisons of the freight rates made by railroad and motor truck carriers have been made from time to time to prove one point or another in connection with the general levels of changes established by these carriers for the transportation of goods. Most of these statements are without significance, and often quite misleading. Generalizations that motor truck freight rates are higher or lower than railroad rate levels are of slight value because there are no clearly defined levels of motor truck rates even on a single territory. Rail rate levels vary from district to district. However, there is little variation among carriers in a single district. The nature of the goods carried, packing requirements, rates of license fees, taxes, the regulations of public service commissions, the condition of road surfaces, topography, rainfall, snowfall, the volume of traffic, the direction of traffic flow, the cost of fuel and oil, wages and other factors which vary in different localities tend to make generalizations as to comparative rate levels ambiguous and sometimes absurd.

Other statements of comparative rates have attempted to generalize upon the differences in the cost of packing goods for shipment by railroad and motor freight and to state the average amount of extra packing required by railroad and motor freight lines for average shipments. The wetness of such statements is apparent upon the most casual observation. There is no average shipment if all traffic is considered and generalizations of this type are utterly futile.

A third class of statements compares motor, rail and other transportation charges per hundred-weight or ton without taking into consideration packing costs, the extra weight added by packing or cartage charges at origin or destination points. These statements are misleading because they do not compare the total transportation costs from the warehouses of the shippers to the store doors of the consignees. Total costs are the only proper basis of comparison to obtain an accurate comparison of rates *via* the alternative means of transportation.

Editor's Note

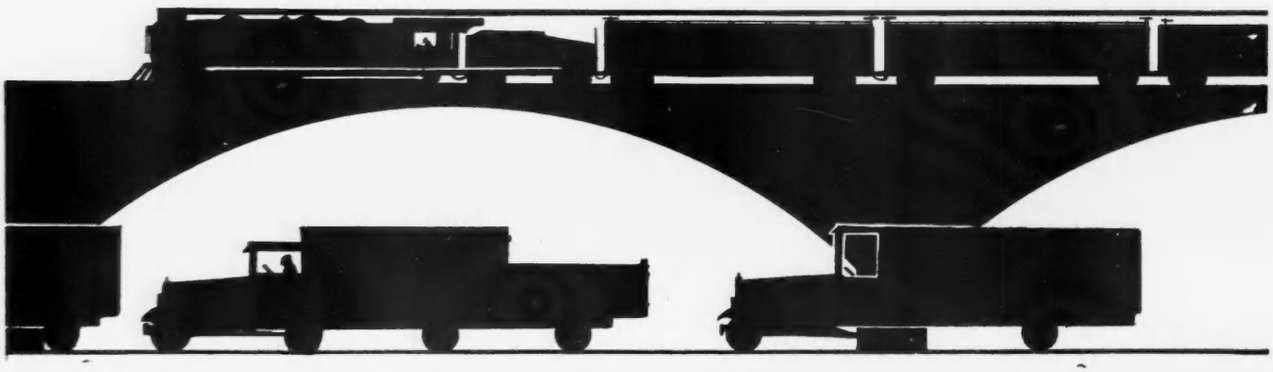
This study is presented to illustrate graphically the methods of analysis a shipper should utilize in determining the type of carrier affording him the cheapest transportation between given points.

It should be understood that the comparisons here made apply only to the commodities selected, and only between the points of origin and destination specified.

The present study does not aspire to do more than to compare the total costs of transportation by motor truck, railroad and express service of a selected list of commodities between one city and a number of cities within a radius of approximately 500 miles. The commodities are selected as representing different classes of high-grade and low-grade general merchandise rated from double the first-class railroad rate to fourth class on less than carload lots. The articles selected in some cases require extra or special packing if shipped by railroad or express and in other cases standard containers are used without regard to the transportation agency used. All of the goods are representative of the types of commodities most commonly moved by railroad, express and motor freight service.

Typical units of shipment are used to avoid the possibility of error through selection of units too large to give an accurate measure of the charges of the different classes of carriers. Shipments of 25,000 or 30,000 lb. are obviously cheapest in the great majority of cases by railroad while shipments of less than 100 lb. in most instances are cheapest by express or truck freight service even for comparatively long distances.

The comparisons made in the present study are based upon actual shipments of representative quantities of freight from shippers *located within one mile of the freight station at the point of origin to consignees who are not located on private railroad sidings within one mile of the delivering railroad freight*



OR MOTOR TRUCK?

depots at the destinations. Cartage charges are those actually charged or quoted representative shippers or consignees and the packing costs and weights are those represented by shippers, as actual or typical. The distances used are those used by the railroads for rate-making purposes and in some cases are inflated to the extent of 10 miles to provide for terminal expenses absorbed by the railroads out of the through rates.

The comparative costs disclosed by this study have no case to prove. The attempt has been made to apply laboratory methods to transportation costs to indicate the procedure necessary to be followed by users of railroad, express or motor freight service in determining type of carrier affording the lowest total transportation costs between given points.

Six representative commodities are selected as the basis for this comparison. They are typical of various grades of merchandise that might move in l. c. l. or less than truckload lots.

TABLE 1—CIGAR BOXES

A typical shipment of wooden cigar boxes, consisting of 200 boxes, set up, not nested, packed in a crate the gross weight of which is 50 lb. The term "boxed," as it is used in the Official Express Classification, is interpreted to mean a wooden box or case with solid or closely fitted sides, ends, top and bottom securely fastened; or a fibreboard, pulpboard or double-faced corrugated strawboard box, provided such boxes conform to the standard express classifications and bear a manufacturer's certificate to that effect (1). Motor freight lines ordinarily do not provide any such restrictions, accepting shipments of empty cigar boxes in crates, boxes or straps. Light crates ordinarily suffice. In some cases, tied bundles of boxes are accepted.

From Philadelphia to	Distance by Railroad and Express (Miles)	Railroad freight classification, double First Class (2). Rates per 100 lb.	Freight charges per shipment	Cartage at origin	Cartage at destination	Extra cost of crating	Total charges by Railroad	Express classification, 1½ times First Class (3). Rates per 50 lb. net and 50 lb. gross	Cartage charges	Extra cost of crating	Total charges by Express	Motor freight rates on bundles, gross weight 50 lb.	Cost of packing, tying in bundles only	Total Motor Freight charges	Cheapest carrier
Bristol, Pa.	32	$ .63	$ .50*	$ .20	$ .20	$ .35	$1.25	$1.07	None	$ .35	$1.42	$ .35	$ .10	$ .45	Truck
Trenton, N. J.	42	.63	.50*	.20	.20	.35	1.25	1.07	None	.35	1.42	.50	.10	.60	Truck
New York, N. Y.	108	.83	.50*	.20	.20	.35	1.25	1.43	None	.35	1 78	.60	.10	.70	Truck
Bridgeport, Conn.	167	1.13	.57	.20	.20	.35	1.32	1.59	None	.35	1.94	1.10	.10	1.20	Truck
Hartford, Conn.	221	1.13	.57	.20	.20	.35	1.32	1.92	None	.35	2.27	1.25	.10	1.35	Railroad
Boston, Mass.	315	1.33	.67	.20	.20	.35	1.42	2.09	None	.35	2.44	2.00	.10	2.10	Railroad
Portland, Maine.	459	1.71	.86	.20	.20	.35	1.61	2.42	None	.35	2.77	2.50	.10	2.60	Railroad

* *Minimum charge per 50 lb. net and 55 lb. gross.*

(1) Official Express Classification No. 30, page 25, Rule 18, (d) (e) and (g).

(2) Consolidated Freight Classification No. 5, page 104, Item 18.

(3) Official Express Classification No. 30, page 36, Item 30.

TABLE 2—NAILS

Five kegs of 107 lb. each. Gross weight of shipment, 535 lb. Low rates are usually made on nails by motor freight lines because of the importance of nails as leaders in the hardware trade.

From Philadelphia to	Distance by Railroad and Express (Miles)	Railroad freight classification, Fourth Class (12). Rates per 100 lb.	Freight charges per shipment	Cartage at origin	Cartage at destination	Total charges by Railroad	Express classification, First Class (13). Rates per 100 lb.	Express charges per shipment	Cartage charges	Total charges by Express	Motor freight rate per 100 lb.	Total Motor Freight charges	Cheapest carrier
Bristol, Pa.	32	$ .16	$ .86	$ .55	$ .55	$1.96	$1.00	$5.35	None	$5.35	$ .20	$1.07	Truck
Trenton, N. J.	42	.17½	.95	.55	.55	2.05	1.00	5.35	None	5.35	.30	1.61	Truck
New York, N. Y.	108	.22½	1.21	.55	.55	2.31	1.45	7.76	None	7.76	.40	2.14	Truck
Brideport, Conn.	167	.31	1.66	.55	.55	2.76	1.65	8.83	None	8.83	.60	3.21	Railroad
Hartford, Conn.	221	.31	1.66	.55	.55	2.76	2.05	10.97	None	10.97	.65	3.43	Railroad
Boston, Mass.	315	.38	2.03	.55	.55	3.13	2.25	12.04	None	12.04	.80	4.28	Railroad
Portland, Me.	459	.42½	2.28	.55	.55	3.38	2.65	14.18	None	14.18	1.20	6.42	Railroad

(12) Consolidated Freight Classification No. 5, page 323, item 32-33. (13) Official Express Classification No. 30.

TABLE 3—ROASTED COFFEE

Roasted coffee is distributed between wholesale and retail stores in double bags weighing 132 lb. ready for shipment. A typical small shipment consists of one double bag weighing 132 lb. gross.

From Philadelphia to	Distance by Railroad and Express (Miles)	Railroad freight classification, Third Class in l. c. l. lots (10). Rates per 100 lb.	Freight charges per shipment	Minimum charge	Cartage at origin	Cartage at destination	Total charges by Railroad	Express classification, Second Class (11). Rates per 132 lb.	Cartage charges	Total charges by Express	Motor Freight rates per 100 lb.	Total Motor Freight charges	Cheapest carrier
Bristol, Pa.	32	$ .21½	...	$ .50	$ .15	$ .15	$ .80	$ .99	None	$ .99	$ .25	$ .33	Truck
Trenton, N. J.	42	.21½	...	.50	.15	.15	.80	1.04	None	.99	.35	.46	Truck
New York, N. Y.	108	.28½	...	.50	.15	.15	.80	1.44	None	1.44	.50	.66	Truck
Bridgeport, Conn.	167	.31	...	.50	.15	.15	.80	1.63	None	1.63	.75	.99	Truck
Hartford, Conn.	221	.31	...	.50	.15	.15	.80	1.83	None	1.83	.85	1.12	Railroad
Boston, Mass.	315	.38	$ .50	...	.15	.15	.80	2.23	None	2.23	1.00	1.32	Railroad
Portland, Me.	459	.42½	.56	...	.15	.15	.86	2.63	None	2.63	1.50	1.98	Railroad

(10) Consolidated Freight Classification No. 5, page 143, item 22; Coffee, roasted and ground. (11) Official Express Classification No. 3a.

TABLE 4—RADIO RECEIVERS

Shipment of five cases, weighing 105 lb. gross each. Gross weight of shipment, 525 lb. A uniform shipping unit is used so that there is no difference in the expense of preparing the freight for railroad, express or motor freight transportation, and no difference in the gross weights of the shipments moved by these routes.

From Philadelphia to	Distance by Railroad and Express (Miles)	Railroad Freight Classification in l.c.l. lots, 1½ times First Class (4). Rates per 100 lb.	Freight charges per shipment	Cartage at origin per 100 lb.	Cartage at origin per shipment	Cartage at destination per 100 lb.	Cartage at destination per shipment	Extra packing or extra weight compared with Motor	Total charges per 100 lb.	Total charges by railroad	Express classification, First Class (5). Rates per 100 lb.	Express charges per shipment	Cartage charges	Total charges by Express	Motor Freight rates per 100 lb.	Total Motor Freight charges, including pick-up and delivery	Cheapest carrier
Bristol, Pa.	32	$ .49½	$2.60	$ .15	$ .75	$ .20	$1.00	None	$ .83	$4.35	$1.00	$5.25	None	$5.25	$ .40	$2.10	Truck
Trenton, N. J.	42	.49½	2.60	.15	.75	.20	1.00	None	.83	4.35	1.00	5.25	None	5.25	.50	2.63	Truck
New York, N. Y.	108	.62½	3.28	.15	.75	.20	1.00	None	.96	5.03	1.45	7.61	None	7.61	1.00	5.25	Railroad
Bridgeport, Conn.	167	.85	4.46	.15	.75	.20	1.00	None	1.18	6.21	1.65	8.66	None	8.66	2.00	10.50	Railroad
Hartford, Conn.	221	.85	4.46	.15	.75	.20	1.00	None	1.18	6.21	2.05	10.76	None	10.76	2.00	10.50	Railroad
Boston, Mass.	315	1.00	5.25	.15	.75	.20	1.00	None	1.35	7.00	2.25	11.81	None	11.81	3.00	15.75	Railroad
Portland, Me.	459	1.28	6.72	.15	.75	.20	1.00	None	1.62	8.47	2.65	13.91	None	13.91	3.50	18.38	Railroad

(4) Consolidated Freight Classification No. 5, page 169, item 20. (5) Residuary rating, not listed in Official Express Classification No. 30, therefore subject to first class rate as per Rule 1, (a).

TABLE 5—COTTON PLUSH

In wrapped rolls, covered with burlap and wire-bound. Shipment of 10 rolls, weighing 75 lb. each. Gross weight of shipment, 750 lb. This is a representative less than carload or less than truckload shipment. The same packing standards are usually followed whether the goods are shipped by railroad, express or truck. Motor freight lines commonly accept this class of goods in less than truckload lots at relatively low rates due to the keen competition among motor express carriers for the business of textile mills.

From Philadelphia to	Distance by railroad and express (miles)	Railroad freight classification, First Class in l. c. l. lots (6). Rates per 100 lb.	Freight charges per shipment	Cartage at origin	Cartage at destination	Total charges by Railroad	Express classification, First Class (7). Rates over 100 lb.	Express charges per shipment, including pick-up and delivery	Total charges by Express	Motor Freight rates per 100 lb.	Total Motor Freight charges	Cheapest carrier
Bristol, Pa.	32	$0.31½	$2.36	$0.75	$0.75	$3.86	$1.00	$5.63	5.63	$0.25	$1.88	Truck
Trenton, N. J.	42	.31½	2.36	.75	.75	3.86	1.00	5.63	5.63	.35	2.63	Truck
New York, N. Y.	108	.41½	3.01	.75	.75	4.51	1.45	10.88	10.88	.50	3.75	Truck
Bridgeport, Conn.	167	.56½	4.24	.75	.75	5.74	1.65	12.38	12.38	.75	5.63	Truck
Hartford, Conn.	221	.56½	4.24	.75	.75	5.74	2.05	15.38	15.38	.80	6.00	Railroad
Boston, Mass.	315	.66½	4.99	.75	.75	6.49	2.25	16.88	16.88	1.00	7.50	Railroad
Portland, Me.	459	.85½	6.41	.75	.75	7.91	2.65	19.88	19.88	1.25	9.38	Railroad

(6) Consolidated Freight Classification No. 5, page 161, item 21, plush, velours, velvets or velveteen, cotton—in bales or boxes. (7) Official Express Classification No. 30.

TABLE 6—STEEL BAR SASH

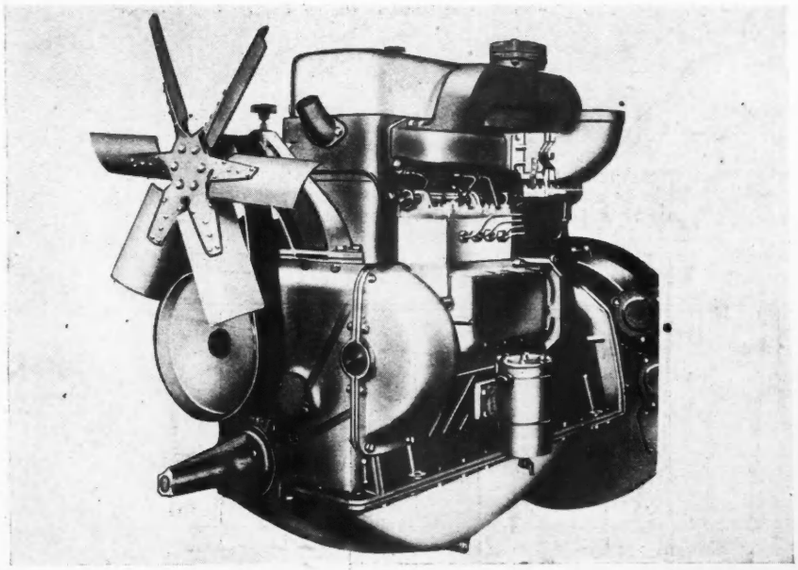
A representative shipment of unglazed steel bar sash, consisting of a bundle weighing approximately 200 lb. ready for shipment.

From Philadelphia to	Distance by Railroad and Express (Miles)	Railroad Freight classification, Second Class in l. c. l. lots (8). Rates per 100 lb.	Freight charges per shipment	Cartage at origin	Cartage at destination	Total charges by Railroad	Express classification, First Class (9). Rates per 100 lb.	Cartage charges	Total charges by Express	Motor Freight rates per 100 lb.	Total Motor Freight charges	Cheapest carrier
Bristol, Pa.	32	$ .27	$ .54	$ .20	$ .20	$ .94	$1.00	None	$2.00	$ .25	$ .50	Truck
Trenton, N. J.	42	.27	.54	.20	.20	.94	1.00	None	2.00	.35	.70	Truck
New York, N. Y.	108	.34	.68	.20	.20	1.08	1.45	None	2.90	.50	1.00	Truck
Bridgeport, Conn.	167	.47½	.95	.20	.20	1.35	1.65	None	3.30	.70	1.40	Railroad
Hartford, Conn.	221	.47½	.95	.20	.20	1.35	2.05	None	4.10	.75	1.50	Railroad
Boston, Mass.	315	.60	1.20	.20	.20	1.60	2.25	None	4.50	1.00	2.00	Railroad
Portland, Me.	459	.73	1.46	.20	.20	1.86	2.65	None	5.30	1.50	3.00	Railroad

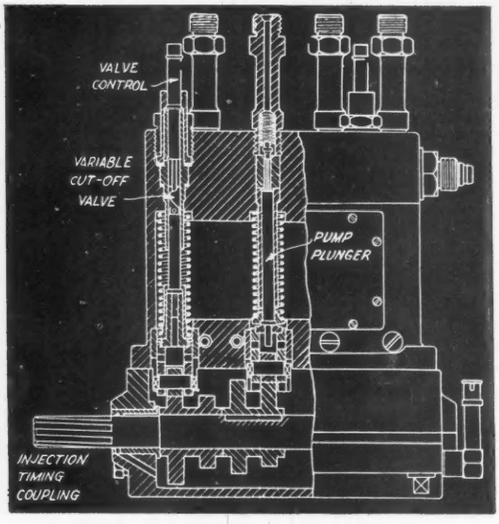
(8) Consolidated Freight Classification No. 5, page 396, Item 17. (9) Official Express Classification No. 30.

HOW THE DIESEL

Though trucks equipped with Diesel engines are rather rare at the present time the reader will do well to familiarize himself with the subject. The questions that immediately suggest themselves are: What is a Diesel engine? Why should people want to use Diesel engines for trucks when gasoline engines are being successfully used for the purpose? This article answers these queries.



Buda built M.A. N. Diesel engine. Note the fuel pump, piping and nozzles under the air intake manifold



Fuel injection pump for multi-cylinder Diesel engines. The time of injection can be advanced or retarded by shifting the driving coupling along the helical splines and the amount of fuel injected varied by turning the pump valve around its axis by means of a lever corresponding to the usual throttle lever

A DIESEL engine, like a gasoline engine, is an internal combustion engine burning petroleum distillates or similar fuels within its cylinders. The Diesel engine operates on a somewhat different principle, however, which enables it to use heavier and cheaper petroleum products than gasoline, and also to burn these fuels more economically. Since this heavier fuel costs considerably less per gallon than gasoline and since less of it is used, the fuel cost is considerably cut down. Incidentally the fuel economy does not fall off materially at small loads because a Diesel engine operates at constant compression irrespective of the load.

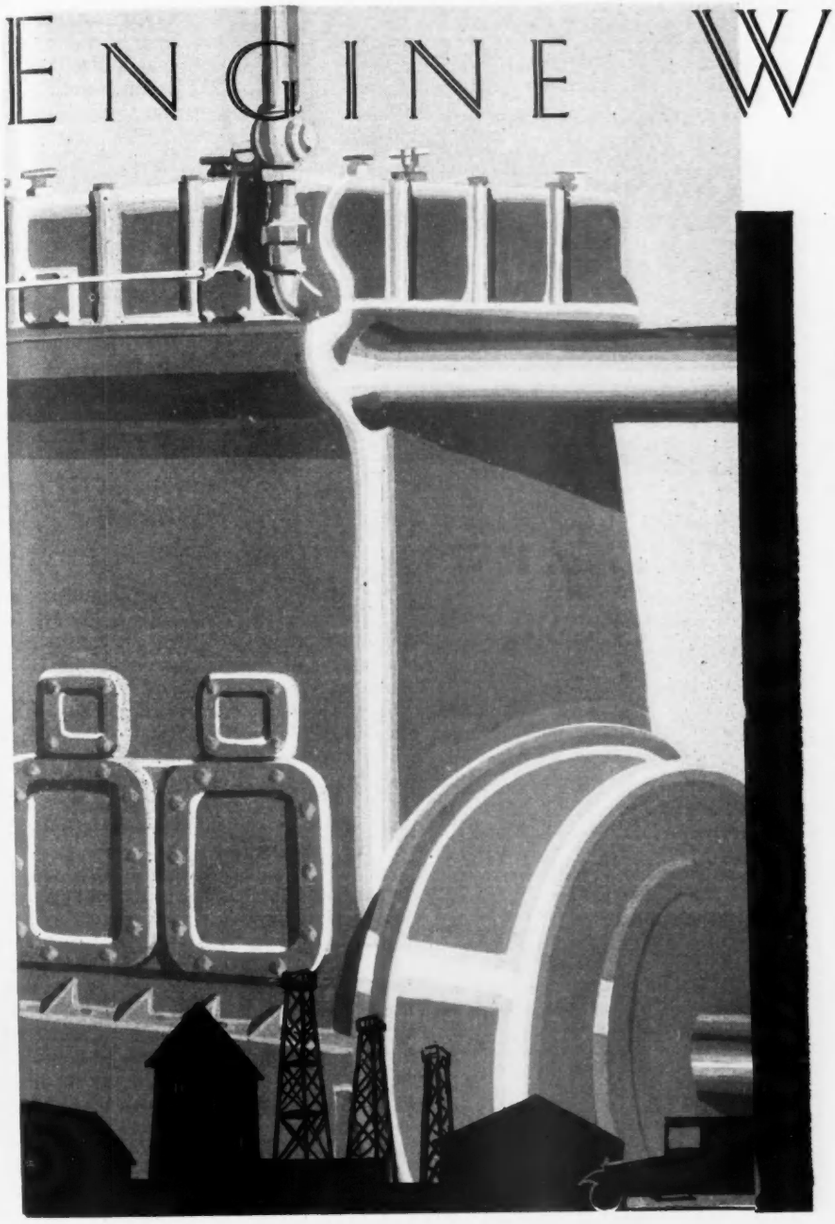
There is one other obvious advantage in the use of Diesel engines and that is that they do away with highly volatile fuel and therefore greatly reduce fire risks. This feature of the Diesel engine is of the highest importance in air navigation, and the Governments of most of the large powers are spending considerable sums at the present time in developing Diesel type aircraft engines.

The difference between a Diesel and a gasoline engine may be shown by comparison of the four strokes of the cycle. During the inlet stroke in a gasoline engine we draw in a combustible mixture of gasoline and fuel vapor which has been prepared in a carburetor. In a Diesel engine during this stroke we draw in pure air only, no carburetor being used. Next follows the compression stroke, during which the cylinder contents are compressed to a fraction of their original volume. In a gasoline engine we compress them to one-fourth or one-fifth of their original volume. If we should try to compress them still more we would have

ENGINE WORKS

By P. M. Heldt

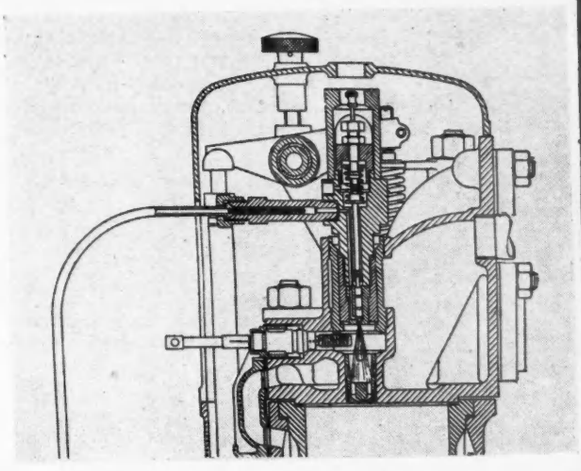
Engineering Editor, Automotive Industries



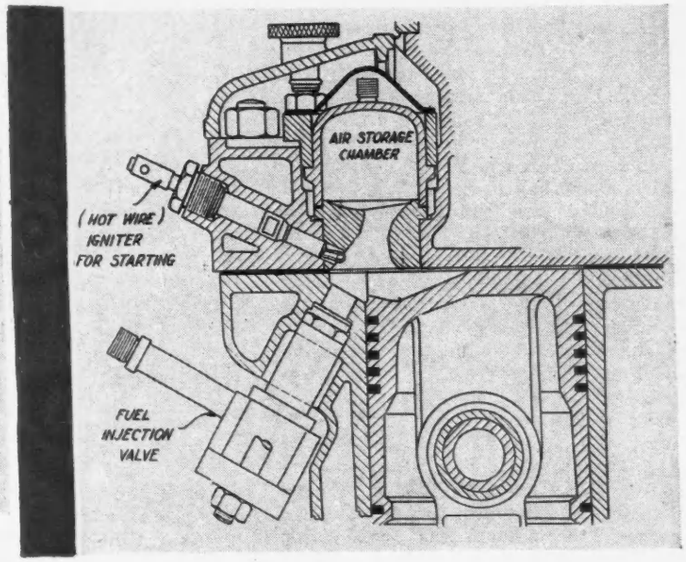
trouble from preignition and consequent knocking. Now, in a Diesel engine, since there is nothing but air in the cylinder during the compression stroke, there can be no preignition, and from this point of view we can therefore compress as much as we like.

In the gasoline engine the fuel enters the cylinders combined with the air, but in a Diesel engine it is introduced separately at the beginning of the power stroke by means of a fuel injection pump and an injection nozzle. The carburetor is therefore done away with and a fuel pump takes its place. Compression of the air in the cylinder is carried up to from 375 to 500 lb. p. sq. in., according to the design, the volumetric compression ratio being from 12 to 15 to 1. As the air is being compressed it becomes heated. With a compression ratio of 12 to 1, if we start with air at 80 deg. F., the temperature at the end of the compression stroke is about 600 deg. F. and therefore capable of igniting the fuel without a spark plug. No special ignition equipment is therefore re-

Diesel engine with air storage in cylinder head. In this engine, as the piston moves down on the power stroke, air from the reservoir in the head flows downward through a venturi passage, meeting the fuel, which is sprayed up into the venturi passage from below. Combustion takes place at the throat of the venturi and it is not necessary for the fuel spray to completely penetrate the air charge



Diesel engine head with ignition chamber

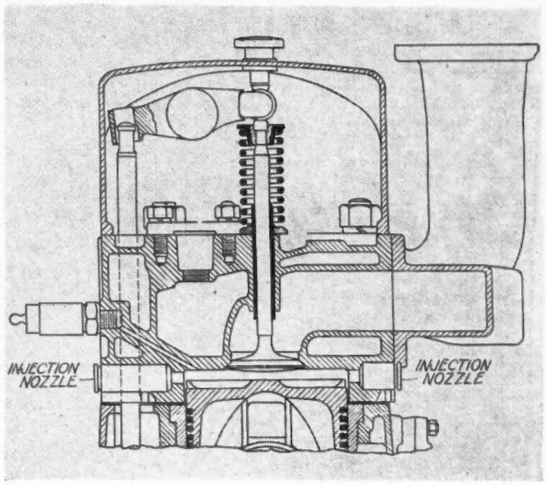


quired, at least not for use when the engine is in regular operation. If a compression ration of 15 to 1 is employed the engine can be started from cold on its own compression at any temperature which may occur where such engines are ordinarily installed. In automotive Diesel engines it is desirable to keep the compression ratio down, because a higher compression results in higher combustion pressures and the engine must be built heavier to withstand them. In order to make it possible to start the engine with the lower compression ratios of about 12 to 1, auxiliary starting devices are sometimes provided, such as an electric heater for the entering air, a small electric coil inside the combustion chamber, which is raised to a high temperature by current from the starting battery just previous to the start, or other means.

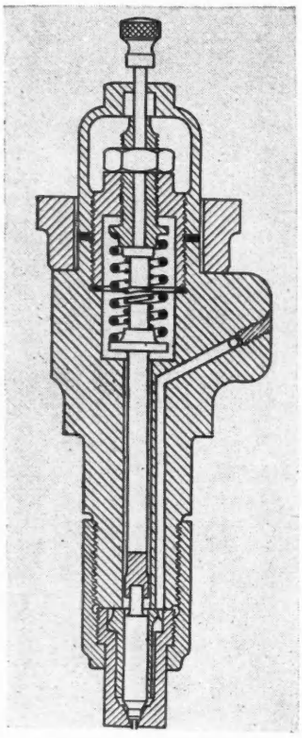
Diesel engines have now been successfully used for marine and stationary powerplant work for more than a quarter of a century. In view of all this experience it might seem an easy matter to design an engine of the Diesel type for truck use. However, there are certain difficulties connected with this problem which are not encountered when designing the larger engines.

Automotive engines, in order to produce a large amount of power for a given engine weight, must be run at high speeds of revolution. In order to make these high speeds possible without appreciable vibration, a considerable number of cylinders must be used, four being the minimum. This makes the individual cylinder quite small, and it is a difficult problem to accurately measure the very small quantity of liquid fuel required per stroke. In a 4½ by 6 in. Diesel engine cylinder which has a displacement of 95.4 cu. in., the volume of air drawn in will be 66.8 cu. in. and the amount of liquid fuel which can be burned by this amount of air under the conditions obtaining in the cylinders is one-fifteen-thousandth of this or 0.0044 cu. in. This is the equivalent of a drop of oil about 3/16 in. in diameter. For idling it is necessary to reduce this charge to at least one quarter, and the difficulty of measuring such minute quantities within limits of 5 or 10 per cent will be realized.

However, measuring the minute quantities of fuel required per stroke is the least of the difficulties connected with high-speed operation of Diesel engines. What is far more difficult is to completely atomize and distribute the fuel charge throughout the combustion chamber during the very short time available. This calls both for very fine spraying of the fuel and for a jet with great penetrative power, and the two are more or less antagonistic; that is, if the liquid is very finely sprayed the jet has less penetrating power than when the globules in the spray are large, as in the former case the air resistance is much greater. As regards the latter factor, the resistance to penetration of air under 500 lb. p. sq. in. pressure is naturally incomparably greater than that of air at atmospheric pressure.



Diesel cylinder head with two opposite open fuel nozzles, injection being controlled entirely by the pump



Sectional view of injection valve which is opened by the pressure of the fuel

Most of the development work now going on in connection with automotive type Diesel engines therefore centers around these two problems: The accurate measurement of the fuel charge and the efficient distribution of the fuel throughout the air charge during the short time available.

In large Diesel engines the fuel is often injected into the combustion chamber under air pressure some 500 lb. p. sq. in. higher than the compression pressure, but this principle is not readily applicable to small engines, and in the latter case mechanical or pump injection is practically always employed. There are two general systems, however, viz., injection into an ante-chamber and injection directly into the combustion chamber.

With the ante-chamber system there is a small chamber in the cylinder head which communicates with the combustion chamber proper through a nipple set into a throat or restricted passage between the cylinder head chamber and the cylinder. This nipple is so supported that the heat which it absorbs from the burning charge which comes in contact with it cannot flow off rapidly to the cylinder block and the water jacket, and the nipple therefore attains a higher temperature than the walls of the ante-chamber and the cylinder, which are water-cooled directly. The nipple is closed at its end toward the cylinder except for one or more small orifices, and it is through these orifices that the ante-chamber and cylinder communicate. The fuel is injected into the ante-chamber. During the compression stroke air enters the ante-chamber through the orifices in the nipple, and when the fuel is injected it is ignited by the heat of compression and by coming in contact with the hot surfaces of the nipple.

Owing to the limited amount of air in the ante-chamber, only part of the fuel can burn there, but the increase in pressure resulting from this combustion causes the remainder of the fuel to be ejected through the orifices of the nipple into the combustion chamber proper, where combustion is completed. With this type of engine usually a moderate compression ratio is employed, and since ignition depends upon contact with the hot surfaces of the nipple, which are not available in starting,

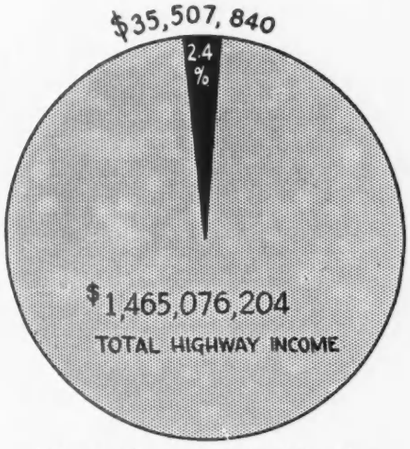
(Turn to page 44, please)

TRUCKS PAY THEIR WAY ON HIGHWAYS

Analysis of Highway Income Shows Railroads Contribute Only 2.4 Per Cent

THOSE still supposing that motor vehicles are not assuming their just proportion of the national road construction and maintenance expense and are saddling this burden on the general public or the railroads will quickly dispel this delusion by studying a brochure prepared by John E. Walker, former assistant on taxation to the Secretary of the Treasury, for the National Automobile Chamber of Commerce. Among other things Mr. Walker's analysis reveals that:

Special motor vehicle taxes in 1927 represented 35 per cent of the total highway income, whereas such taxes in 1914 represented only 5 per cent of the total income. Meanwhile highway income has increased over 610 per cent to $1,465,000,000. Virtually all revenues secured from special motor vehicle taxes are spent on *main state* road construction and maintenance, while only one-tenth of the revenues derived from general taxes are diverted to this purpose. In 1927 rail taxes used for highways amounted to less than two and a half per cent of the total highway income and of this amount six-sevenths was expended for the improvement of secondary or local roads, a greater part of which are tributary to rail transportation.



The black segment in this chart represents the railroads' part of the total highway bill in 1927

Private motor trucks not only pay for the use of the roads but they pay twice as much in special taxes per vehicle as private automobiles. The common-carrier motor truck of average size pays $303 or 14.2 times as much as private automobile and the common-carrier bus $512 or 23.6 times as much. General taxes paid on public or private garages, filling stations, repair shops, etc., are not included in these figures.

Motor vehicle tax collections accounted for 66 per cent of the increases in the total of state taxes collected in 1927 as compared with 1922.

Rural highway income for the year 1927 amounted to $1,465,076,204, while expenditures for construction and maintenance totaled $1,412,711,423. General property tax levies and miscellaneous sources of revenue produced $596,163,022 of the total *highway income* (see Fig. 1). While this figure constitutes 40.7 per cent of the highway income it is only 11.5 per cent of $5,180,000,000, the total state and local taxes collected, less special motor vehicle taxes. A comparison of the highway income figures for 1921 and 1927 reveals some marked shifts in the amounts of income derived from the different sources. The figures (see Table 1) show: First, *a large increase in the total program, with the ratio of general property tax contributions remaining constant;* and second, *a tremendous increase in motor vehicle tax income* replacing bond funds to a considerable degree, and at the same time contributing to the expanded road program.

As the total rural highway income amounted to $1,465,076,204 in 1927 the railroad payments of $35,507,840 were 2.4 per cent of the total.

The 2.4 per cent of the road fund obtained from railroad (*Turn to page 60, please*)

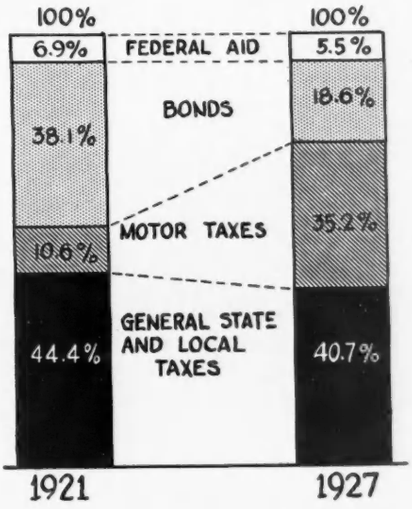
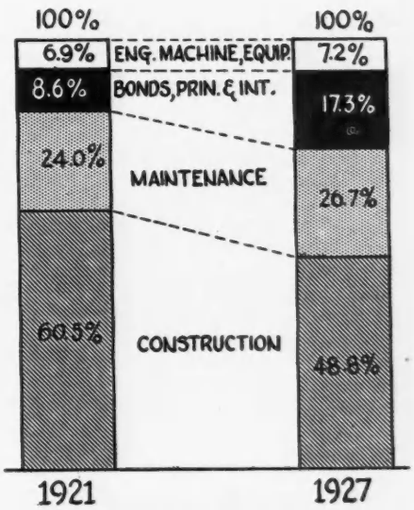


Chart comparing sources of highway income in 1921 and 1927



Comparison of manner in which highway funds were expended, 1921 and 1927

SMALL BUSINESSES

Professional Hauling Has Great Possibilities for Expansion Among Farming, Manufacturing and Retailing Units Not Large Enough to Own Their Own Equipment

By

George P. Anderson

Director of Sales Engineering, Dodge Brothers, Inc.

OF the nearly 3,000,000 trucks now in operation, it is estimated that 82 per cent are owned by people not primarily in the hauling business, and 18 per cent are owned by professional haulers. Of this last group about 11 per cent are employed in contract hauling and the balance, 7 per cent, are operated for hire as common carrier trucks.

The large group of 82 per cent of the trucks, of course, do the great majority of the truck hauling. The operation of these trucks is incidental to the particular business of the owners. It is natural that business concerns of sufficient size as to require a considerable amount of hauling should own their own trucks. The great flexibility of this equipment can so be most efficiently applied without delay to the varying requirements of each day. It is likewise possible for the owner of a truck to obtain his hauling more economically than he could by hiring this service, providing he has a sufficient volume

Chart No. 1

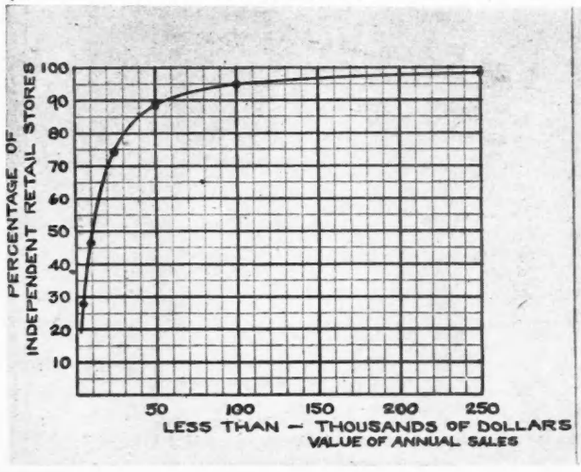
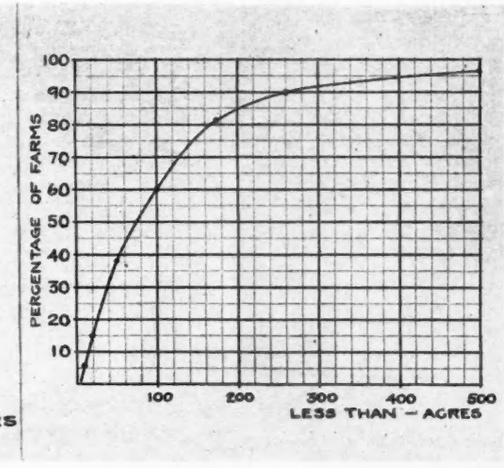
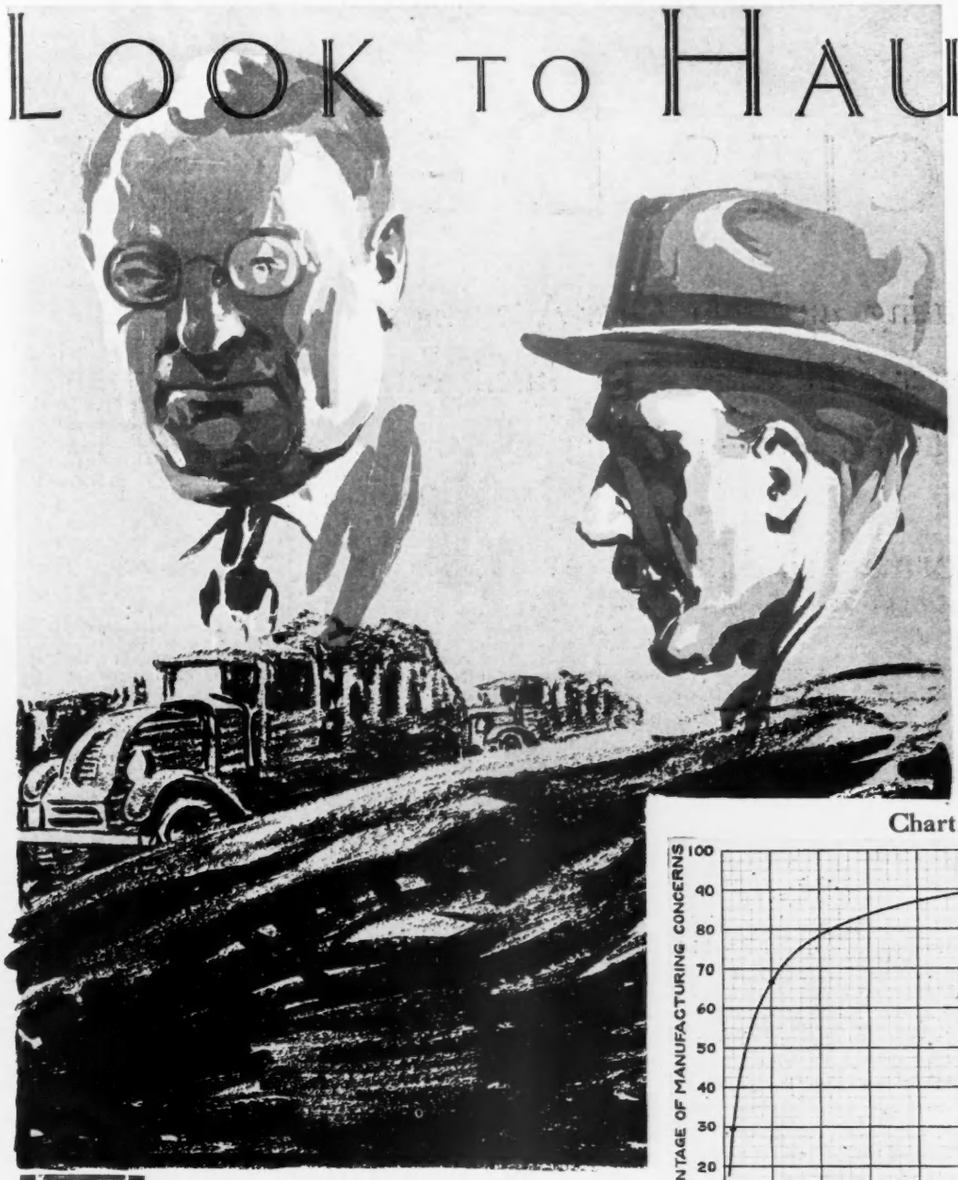


Chart No. 2



LOOK TO HAULERS



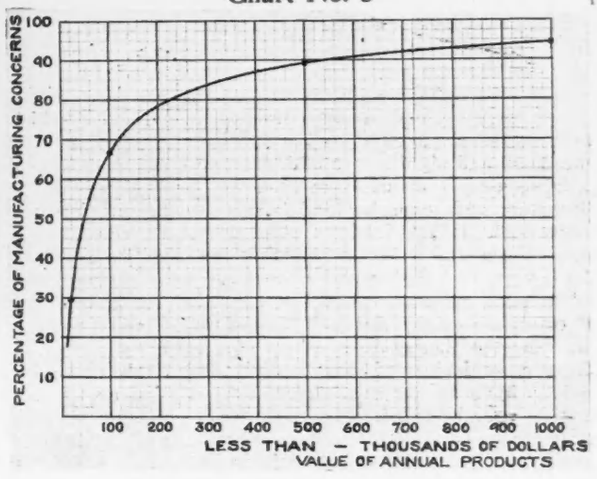
of trucking work. It is, of course, not necessary for him to pay a profit on his trucking operations above the return required by his investment, and in a large percentage of such operations, the convenience and dispatch made possible by truck ownership is an advantage of the utmost importance. This class of truck ownership is bound to increase.

There is, however, a class of business units very small in size but large in numbers which must be considered of great importance because it represents a large portion of the country's population. These business enterprises are not large enough to own their own trucks but the welfare of the country demands that they realize the economic advantages made available by means of the truck. The small business is necessarily dependent upon the professional hauler. We should, therefore, consider the prevalence of the small business.

The United States Census of Agriculture for 1925 gives us statistics on the number of farms of various sizes, and from this I have made graphic chart No. 2. This shows the number of farms in percentage of the total for sizes less than a given size in acres. About 6 per cent of the farms are less than 10 acres, 15 per cent are less than 20 acres, 38 per cent are less than 50 acres, 60 per cent are less than 100 acres, and 82 per cent are less than 260 acres in size. This shows a very considerable proportion of small farms.

The United States Census of Manufacturers for 1925 gives us corresponding information in the field of industrial production. Graphic chart No. 3 shows the percentage of the total number of manufacturing concerns for all industries combined, having annual products valued at $5,000 or more, whose products are worth less than a given amount in thousands of dollars. About 30 per cent of these concerns have annual products valued at less than $20,000; and have an average of less than three wage earners. Sixty-six per cent have annual products valued at less than $100,000; and the average number of wage earners for the group producing between $20,000 and $100,000 is less than 10. And 89 per cent of these concerns have annual products valued at less than $500,000; and the average number of wage earners for the group producing between $100,000 and $500,000 worth of goods is slightly less than 40. Thus it is evident that at least two-thirds of these manufacturing concerns would be considered very small establishments.

Chart No. 3



Comprehensive statistics of retail merchant establishments are not so readily available. That the same condition exists among retailers is indicated, however, by a census of retail establishments which included 11 important cities. Not including chain stores, this census included about 80,000 stores, 40 of these stores having annual sales of over $5,000,000 each.

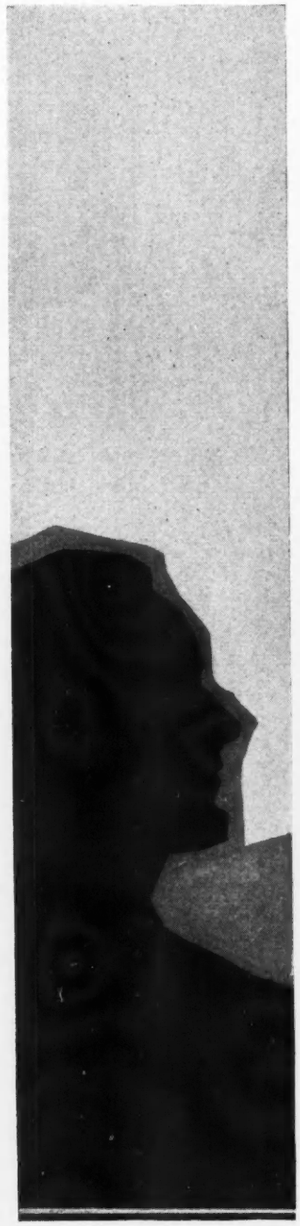
(Turn to page 60, please)

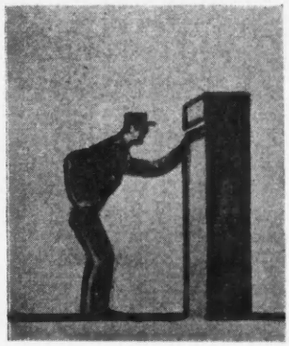
NEW POLICIES DEMAND

Straight-Rating and No Over-Allowance Give Greater Opportunity for Intelligent Transportation Selling

By Norman G. Shidle

Directing Editor, Chilton Class Journal Publications





THE recent announcements by Paul W. Seiler that General Motors Truck Corp. was eliminating excess trading allowances in connection with its selling, and that it had instituted the gross weight method of rating trucks, were met by the truck trade at large with a very intense interest and some slight skepticism. With full realization that final judgment as regards the practical success of the Seiler truck policies lies in the future rather than in the present, it seems pertinent to examine the full implications and significance of these two policies, since both of them have been discussed and experimented with in times past. Of special interest is their significance from the standpoints of the dealer, distributor and operator.

The elimination of excess allowances, of course, is of special importance as regards the heavy-duty truck field, since a majority of the light-truck makers have been operating on a reasonably sound basis in this regard for some time past. The gross weight method of truck rating bids fair to be of growing importance, judging from the careful consideration and discussion being given it by many important truck executives.

To begin with, the gross weight method of rating seems likely to have as a by-product the forcing into truck retail selling of elements previously regarded as sound from a theoretical standpoint, but actually practiced to a very limited extent by the average dealer and salesman.

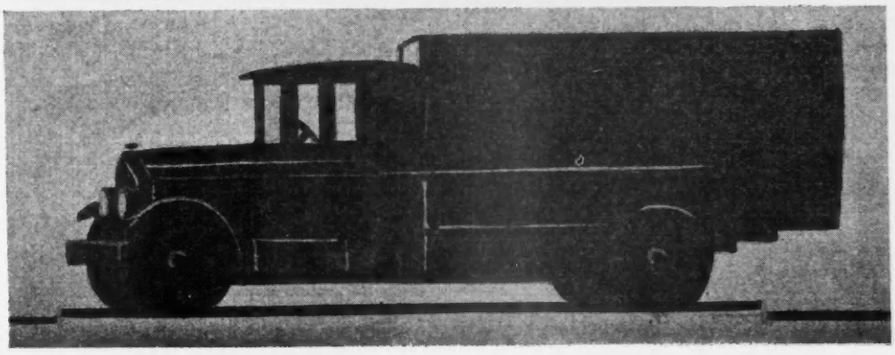
The gross weight method of rating, it will be recalled, is briefly as follows: The manufacturer takes the weight of a truck chassis, scientifically computes its carrying capacity, adds these two factors and arrives at a figure termed the gross weight, which constitutes the rating of the truck. Specifications accompanying each truck include the chassis weight and gross weight and gross weight rating. To determine the carrying capacity, therefore, it is necessary simply to deduct the chassis weight from the gross weight. Pay-load, in turn, is reckoned by deducting the body weight from the carrying capacity.

The elimination of the variable factor of body weight in determining the load which properly may be carried on a given chassis is among the most important advantages gained by this rating method. If a particular chassis is designed to carry a total load of 3000 lb., the pay-load which can be carried efficiently obviously must vary in proportion to the weight of the body utilized. The gross weight method of rating eliminates that confusion.

The approach of a truck salesman to his prospect under this rating of his products, it would seem, is more likely to be in terms of transportation or use to which the vehicle is to be put, instead of in purely competitive terms. With nothing but a gross weight rated vehicle to sell, the salesman inevitably, it would appear, will have to approach his customer, at some time during the negotiations, with some such question as "What is the use to which you are putting or wish to put a truck?" The hauling problem of the customer, in other words, simply must be ascertained by the salesman or dealer before he properly can sell his specific vehicle under the gross weight rating plan.

Fundamentally, this means added opportunity for the intelligent dealer and the sound salesman, for practically every student of truck selling problems has agreed for years that the best truck selling is transportation selling. Superficially and immediately the new policy would seem to involve definite necessity for some revision in the selling

GOOD SALESMEN



practice of many retailers and the acquiring of further knowledge of truck transportation fundamentals on the part of salesmen.

The final result almost inevitably would seem to be a real improvement in the retail selling forces of dealers and a markedly increased opportunity for profits and success for those retailers who are willing to study those transportation problems which are the basis of the great business of which they are a part. The truck buyer and operator seem certain to benefit definitely from installation of vehicles more accurately fitted to the requirements of each job.

In those states where trucks are taxed according to manufacturer's rated capacity, moreover, vehicles sold under the gross weight rating system probably will not be affected favorably as conditions stand today. The soundness of the policy, however, is such that it is reasonable to expect that in the long run the retailer operating under it probably will find himself at an advantage rather than at a disadvantage.

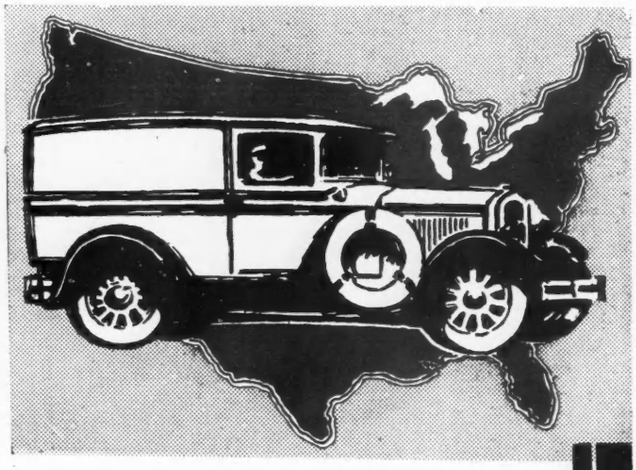
Obviously the gross weight rating plan in itself will not bring about a millenium as regards statements about truck capacities, even though it will, almost as obviously, operate to improve existing conditions materially. To be effective, the gross weight rating plan must be accompanied by several other definite policies

(Turn to page 56, please)

1928 Truck Sales

By George

HERE are analyses of 1928 new truck sales, registrations and production. They show, among other things, that 43 states went over their 1927 sales totals; that the increase over 1927 in new trucks sold was 6.4 per cent; that registrations fell off only in nine states, and that trucks of 1-ton and less than 1½-ton capacity were 70.1 per cent of the total 1928 production.



Analysis of Dealer Relation to Registrations and Sales

THIS analysis is noteworthy in that it reveals the approximate uniformity among percentages for each zone of total truck dealers, registrations and sales.

	Per Cent of Total Registrations 1928	Per Cent of Total New Truck Sales 1928	Per Cent of Total Commercial Vehicle Dealers
New England	6.6	7.5	5
Middle Atlantic	22.0	21.5	15
South Atlantic	9.4	9.9	10
East North Central	25.0	21.3	22
East South Central	4.0	5.1	5
West North Central	11.4	13.0	22
West South Central	9.3	10.1	9
Mountain	2.9	4.3	5
Pacific	9.4	7.3	7

Analysis of 1928 New Truck Sales by States and Zones

THIRTY-THREE of the 48 states and District of Columbia made gains in the sale of new trucks during the year 1928 in which, this compilation shows, 353,397 new trucks were sold domestically. This represents a gain of 6.4 per cent over 1927. Only one zone—the South Atlantic, which was affected by diminished sales in Florida and Georgia—fell below its 1927 total.

Truck dealers in the New England and Middle Atlantic zones enjoyed the best average sale of new trucks per dealer, both being well above the national average of 13.8.

	New Truck Sales in 1928	Per Cent of Total 1928 Sales	Per Cent Gain, 1928 Over 1927	New Truck Sales per Dealer in 1928
New England Zone	26,908	7.5	7.2	21.2
Maine	3,056	0.8	—1.4	15.4
New Hampshire	1,631	0.4	16.5	14.4
Vermont	1,536	0.4	28.0	11.7
Massachusetts	12,222	3.5	17.5	23.6
Rhode Island	1,871	0.5	—14.9	21.5
Connecticut	6,592	1.9	3.2	29.4
Middle Atlantic	75,986	21.5	0.1	19.4
New York	35,502	10.0	0.6	20.8
New Jersey	14,419	4.1	—7.0	23.6
Pennsylvania	26,065	7.4	3.8	16.2
South Atlantic	35,189	9.9	—5.1	13.7
Delaware	1,018	0.3	1.8	26.1
Maryland	4,844	1.4	3.1	20.7
Dist. of Columbia	1,613	0.4	—5.1	52.0
Virginia	6,267	1.8	—2.1	12.5
West Virginia	3,660	1.0	30.7	9.2
North Carolina	7,255	2.1	3.3	14.8
South Carolina	3,035	0.8	4.7	13.9
Georgia	3,902	1.1	—26.4	9.9
Florida	3,595	1.0	—25.1	14.2
East North Central	75,027	21.3	9.8	13.6
Ohio	19,736	5.6	28.8	14.3
Indiana	9,897	2.8	—12.4	15.7
Illinois	18,313	5.2	12.3	13.7
Michigan	17,206	4.9	17.8	15.7
Wisconsin	9,875	2.8	—8.6	8.9
East South Central	17,819	5.1	1.2	12.7
Kentucky	4,680	1.3	17.0	10.9
Tennessee	3,930	1.2	6.2	11.0
Alabama	6,518	1.8	10.5	22.2
Mississippi	2,691	0.8	—32.7	8.5
West North Central	45,353	13.0	15.4	8.1
Minnesota	7,654	2.2	7.8	7.7
Iowa	8,899	2.5	32.8	7.5
Missouri	10,228	2.9	—7.0	14.0
North Dakota	4,416	1.3	47.2	9.6
South Dakota	3,679	1.1	60.0	8.4
Nebraska	5,501	1.6	12.3	6.8
Kansas	4,976	1.4	15.7	5.1
West South Central	35,933	10.1	13.4	15.8
Arkansas	3,283	0.9	—34.3	10.9
Louisiana	3,551	1.0	17.8	13.8
Oklahoma	8,569	2.4	8.8	14.9
Texas	20,530	5.8	30.8	17.9
Mountain	15,509	4.3	14.9	11.4
Montana	4,246	1.2	28.7	15.5
Idaho	1,734	0.5	2.0	8.5
Wyoming	1,126	0.3	25.1	8.3
Colorado	3,706	1.1	0.2	11.2
New Mexico	1,346	0.3	68.2	15.3
Arizona	1,624	0.4	24.9	13.9
Utah	1,393	0.4	—0.5	9.2
Nevada	334	0.1	—16.5	5.5

13.8 PER DEALER

T. Hook

Pacific	25,673	7.3	9.2	14.5
Washington	4,580	1.4	—8.4	10.9
Oregon	3,044	0.8	1.5	12.4
California	18,049	5.1	16.4	16.3
United States	353,397	100.0	6.4	13.8

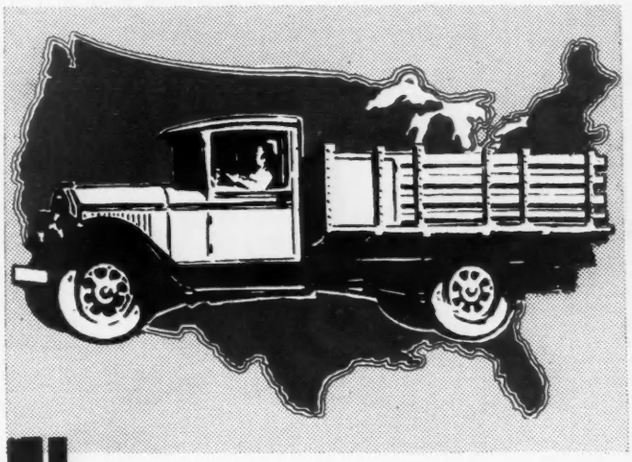
Analysis of 1928 Truck Registrations by States

THE revised truck registration figures as of Dec. 31, 1928, represent a gain of 5.1 per cent over the 1927 total. Only nine of the states contributing to the total of 3,092,059 reported losses. Of these Arizona, Maryland and New Mexico stand out with notorious prominence. The latter is somewhat of a statistical curiosity in that its 1928 new truck sales increased 68.2 per cent over 1927, whereas registrations, notwithstanding this healthy contribution, dropped off no less than 38 per cent.

State	Truck Registration in 1928	Per Cent of Total	Per Cent Increase Over 1927	Trucks Registered per Dealer
Alabama	32,567	1.05	2	110.8
Arizona	7,710	0.2	—24	65.9
Arkansas	36,626	1.2	13	122.5
California	208,462	6.7	—3	187.9
Colorado	18,955	0.6	—10	57.2
Connecticut	48,029	1.6	10	214.4
Delaware	10,015	0.3	15	256.8
Dist. of Columbia	16,051	0.5	10	517.8
Florida	60,181	1.96	—3	236.9
Georgia	40,299	1.3	6	102.0
Idaho	11,657	0.4	11	56.9
Illinois	190,356	6.2	5	142.5
Indiana	119,419	3.9	3	189.8
Iowa	61,019	1.94	—5	51.5
Kansas	56,433	1.8	3	58.3
Kentucky	31,787	1.02	7	74.1
Louisiana	40,000	1.20	3	155.0
Maine	28,212	0.91	—6	142.5
Maryland	8,038	0.29	—31	34.3
Massachusetts	87,068	2.8	6	168.0
Michigan	165,367	5.3	6	150.9
Minnesota	89,026	2.9	9	89.8
Mississippi	31,132	1.01	37	97.9
Missouri	75,394	2.5	7	103.2
Montana	21,969	0.7	22	80.2
Nebraska	28,069	0.9	—11	34.9
Nevada	5,549	0.18	3	90.9
New Hampshire	14,048	0.5	17	124.3
New Jersey	127,191	4.1	1	208.5
New Mexico	2,463	0.07	—38	27.9
New York	333,755	10.9	5	195.8
North Carolina	44,000	1.4	13	89.8
North Dakota	21,119	0.7	33	45.8
Ohio	202,000	6.5	2	146.3
Oklahoma	57,783	1.9	2	100.7
Oregon	21,952	0.72	5	89.6
Pennsylvania	221,083	7.1	3	137.2
Rhode Island	19,904	0.6	2	228.8
South Carolina	22,538	0.73	12	103.3
South Dakota	20,393	0.66	23	46.7
Tennessee	27,832	0.9	9	78.1
Texas	151,634	4.9	32	131.9
Utah	14,321	0.45	28	94.8
Vermont	7,546	0.23	22	57.6
Virginia	54,000	1.7	10	107.5
Washington	59,379	1.9	2	142.0
West Virginia	35,612	1.15	14	89.2
Wisconsin	96,516	3.2	9	87.6
Wyoming	7,600	0.24	19	55.8
United States	3,092,059	100.00	5.1	120.3

Truck Production by Capacities

Capacity	1928	% Total	1927	% Total	1926	% Total	1925	% Total
¼-ton and less	78,900	13.7	78,000	16.0	63,100	12.1	46,200	8.9
1-ton and less than 1½	403,700	70.1	319,900	65.7	349,000	66.9	390,200	75.2
1½-ton and less than 2	27,800	4.8	28,700	5.9	45,900	8.8	29,100	5.6
2-ton and less than 2½	31,100	5.4	27,700	5.7	19,300	3.7	11,900	2.3
2½-ton and less than 3½	20,400	3.5	16,600	3.4	17,700	3.4	16,600	3.2
3½-ton and less than 5	4,500	0.8	4,400	0.9	7,800	1.5	6,200	1.2
5-ton and over	4,100	0.7	3,900	0.8	8,900	1.7	7,800	1.5
Miscellaneous	5,900	1.0	7,800	1.6	9,900	1.9	10,900	2.1
Totals	576,400		487,000		521,600		518,900	



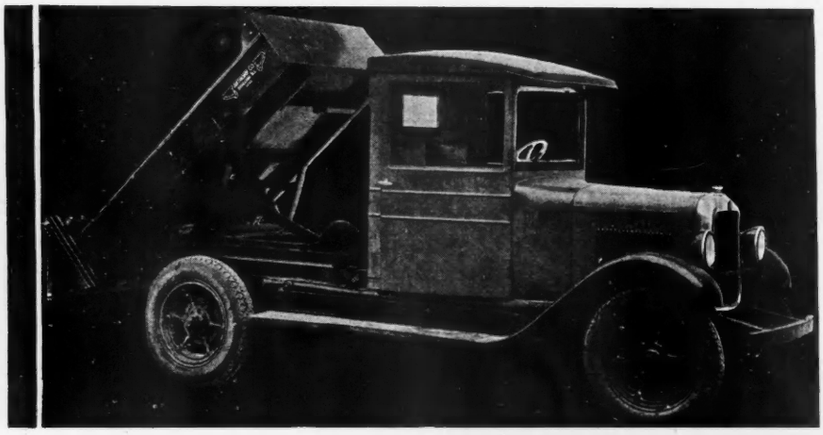
Analysis of 1928 Truck Registrations by Zones

THE West South Central zone, comprising Arkansas, Louisiana, Oklahoma and Texas, recorded the most substantial registration increase in 1928. The only zone that failed to make a gain was the Pacific (California, Oregon and Washington), which fell 1.2 per cent under its 1927 mark.

Zone	Commercial Vehicle Registrations in 1928	Per Cent of Total 1928 Registrations	Per Cent Increase, 1928 Over 1927	Commercial Vehicles Registered Per Dealer
New England	204,807	6.6	6.0	160
Middle Atlantic	682,029	22.0	2.97	174
South Atlantic	290,734	9.4	6.0	113
East North Central	773,658	25.0	4.1	139
East South Central	123,318	4.0	12.2	88
West North Central	351,453	11.4	4.8	63
West South Central	286,043	9.3	18.2	127
Mountain	90,224	2.9	2.3	66
Pacific	289,793	9.4	—1.2	163
United States	3,092,059	100.0	5.1	120

NEW PRODUCTION

Anthony Rotating Hoist Body Mounted on a General Motors Model T-19. One complete revolution of the gear raises and lowers this body



ANTHONY Rotating Hoist Bodies, made for mounting on Chevrolet six-cylinder Utility chassis and General Motors chassis Model T-19 are furnished in 1 yd. capacities convertible to 2 yd. as standard equipment, although they are also supplied with 1½ yd. bodies convertible to 2 yd.

The body is raised or lowered by an arm connected to a stub shaft mounted off-center on a driving gear. One complete revolution of the gear raises and lowers the body, it being raised as the gear passes through one-half revolution and lowered as it completes its cycle. Power is derived from the truck engine through a power take-off and propeller shaft, fitted with universal joints. With the exception of the main gear the mechanism is completely enclosed in a housing. The hoist operates at any of the driving speeds and can be raised or lowered while the truck is in motion. Lifting time is about 10 seconds. The tipping frame and sub-structure is composed of electrically welded channel and angle irons and the bodies are made with sides and bottom formed from one sheet of 10-gage steel. Anthony Co., Inc., Streator, Ill., is the maker.

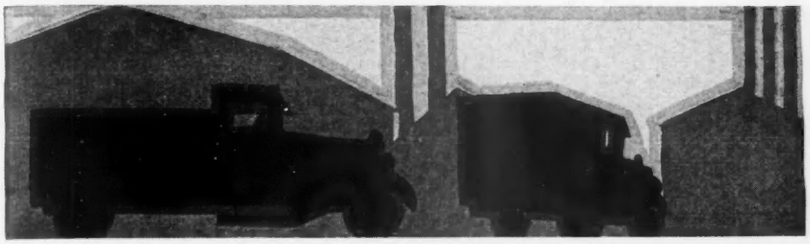
The 23-section rack of the Hercules Ditwiler Dump body curves back into a dust-tight case when body is lowered

TWO new cabs have been added to the line of the Metropolitan Body Co., Bridgeport, Conn., the Couplex, a de luxe type for light duty trucks, and the Duplex, an open cab for rugged jobs, equipped with a full-floating windshield to withstand distortion of chassis frame without injury to cab or windshield.

The Couplex is built on a heavy oak sill frame with steel sides and curved roof. Corner glasses are on either side of the one-piece plate glass windshield and are framed in slender metal posts that also serve to reinforce roof and dash. The windshield slopes and opens outward from the base. Windshield ventilation is controlled by a new type of hinge. Cowl ventilators also are built in the sides and under the corner glasses. The doors are lined with metal panels and have large windows controlled by a quick acting regulator. The lock is controlled by a remote door handle. The interior of roof is fitted with an attractive panel. Seat risers are protected with metal scuff plates and support deep spring cushions and lazy backs. Pockets for drivers' papers are provided on either side of a large rear window.

The Duplex cab roof is not rigidly attached to the windshield brackets and frame weave is taken up by the Metro Spring Front, which is patented and consists of two steel rods, one fastened to each side of top of cab. This rod carries a tubular steel shaft, attached by a specially designed universal joint to the top of the windshield at the cen-

BODIES AND CABS



ter. In the tube are two springs against which the two rods are forced under 4-in. spring tension. On side twist of the cab, the rods sliding in the tube come in contact with the springs, permitting a 7-in. distortion of the cab.

The cab is of structural steel frame construction, covered with blue annealed sheet steel. Sub-structure and cross-members are oak. Doors are equipped with free-opening type hinges and snap lock, which fastens door securely when in opened position. The cushions and lazy back are of full spring construction and sides of cab are padded to insure comfort. Spring roller curtains are furnished for the sides. The two-piece windshield is constructed in two sections, the upper sections opening outward for ventilation. The glass is plate and set in rubber.

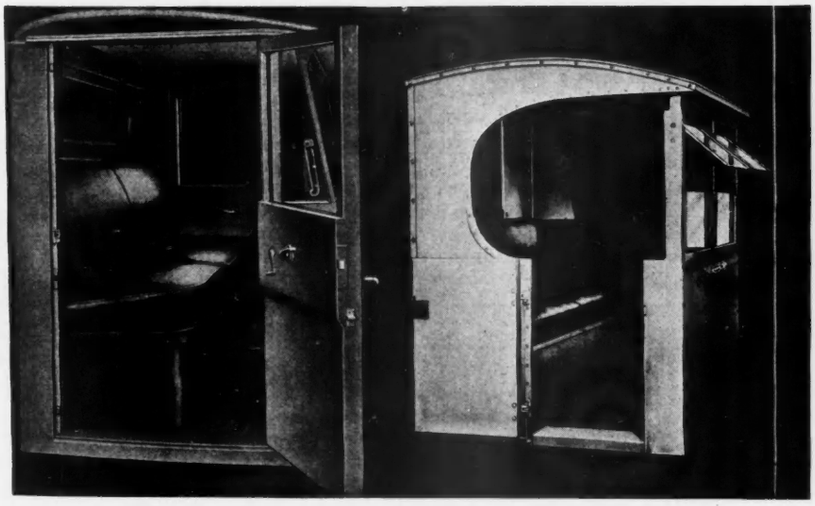
THE new Heil No. 1 Junior Hoist for light duty trucks of 1 to 1½-ton capacity introduced by the Heil Co., Milwaukee, was designed for mounting on the chassis frame with a minimum of time and effort. It is marketed as a complete unit, which includes a single cylinder hydraulic hoist, hoist supporting frame, power take-off, wood sills, connecting parts and either of three standard Heil "L" type bodies.

The hoist frame fastens to the chassis frame with U-bolts and frame clips, and the hinges which bolt to the subframe of the body are attached to the rear end of the hoist supporting frame.

Heil No. 1 Junior Hoist for 1 to 1½-ton trucks. It is marketed as a complete unit for quick mounting

A single cylinder with a 5¾-in. bore encases the piston. Piston speed depends on the speed of the engine and dumping time varies from 5 to 10 seconds. Power is delivered from take-off through chain and sprocket to a universal joint equipped, sliding sleeve propeller shaft and thence to a gear operated pump integral with the hoist cylinder.

When lifting, the hoist rotates in saddle trunnions. The piston cross-head shaft is firmly bolted to the body subframe. Hoist controls are placed in the cab, one lever engages the power take-off and the other operates the hoist by-pass lever which controls the return of body to riding position. The maximum dumping angle is 55 deg.



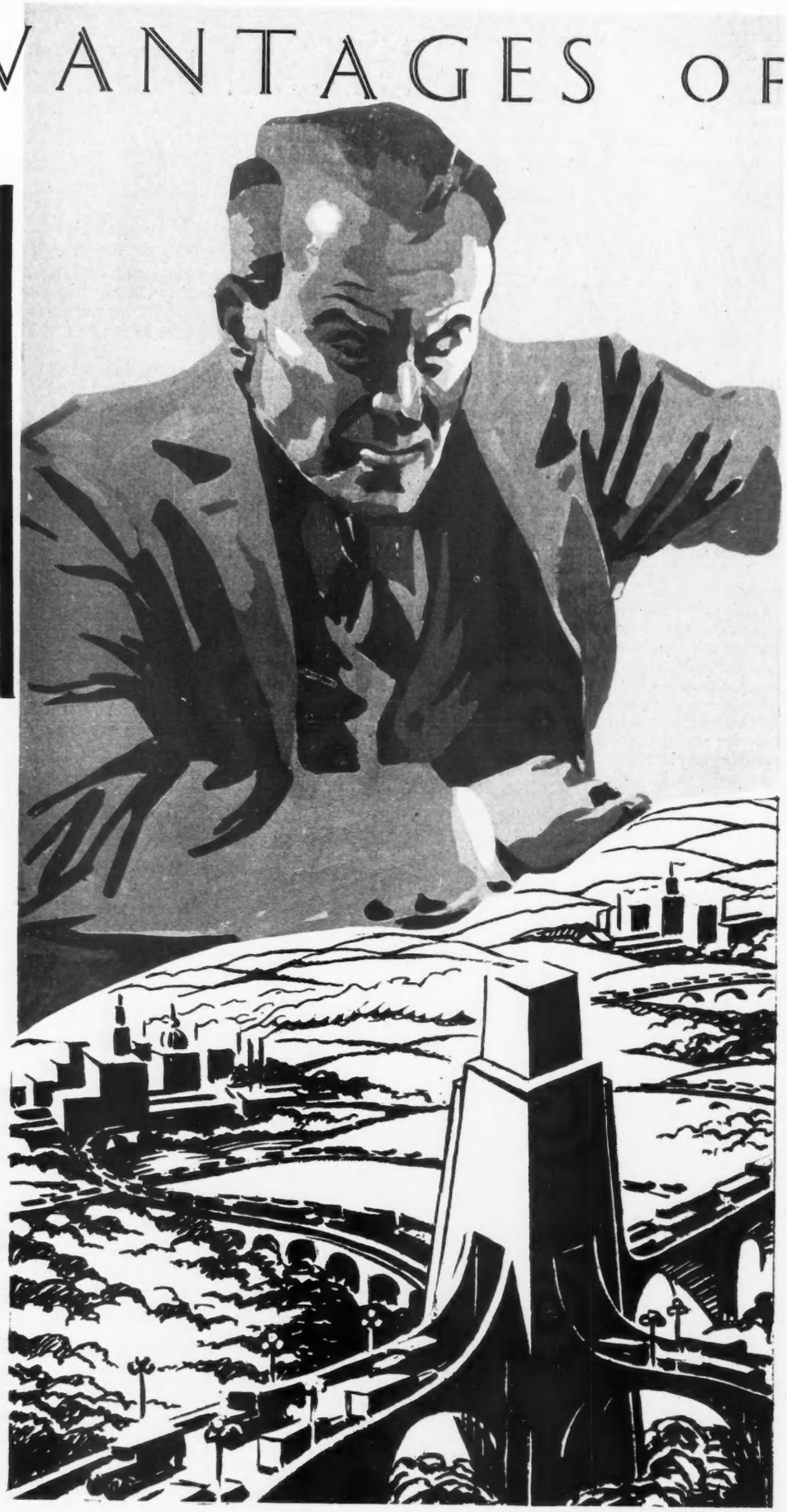
AN articulated rack, with teeth which mesh into the final spur gear, is the feature of the Hercules Ditwiler power dump body made by the Ditwiler Co., Galion, Ohio. Twenty-three sections held together by ⅝-in pins with

(*Turn to page 58, please*)

Far Left—The Metro Couplex cab for light duty trucks. Left—The Metro Duplex open cab for rugged jobs. The roof is flexibly attached to the windshield to take up frame weave

ADVANTAGES OF

The second article of a series on Co-operative Truck Terminals



THE value of motor truck transportation to rapid and economical distribution of goods is obvious to the most casual observer. During the period of the World War shippers and consignees were urged or required to use motor trucks in order to relieve the congestion of the railroads or to avoid railroad embargoes. The highways were used extensively by the pioneer motor freight haulers for transporting freight from city to city, and to a steadily increasing extent each year since.

One weakness characterized the movement of freight over the highways during this period: the trucks were loaded heavily in one direction and went begging for loads to fill them on the return trips. To overcome the weakness of unbalanced traffic, bureaus were organized to seek return loads for trucks coming with loads into one community from other cities or towns. These return-load bureaus did much to reduce empty-truck mileage and to conserve transportation facilities at a time when every square foot of transportation space and every gallon of fuel was vitally

(*Turn to page 56, please*)

JOINT TERMINALS

Many Benefits Accrue to Carriers, Consignors and Consignees

By G. Lloyd Wilson

Professor of Commerce and Transportation, University of Pennsylvania

Cooperative Truck Terminal Benefits to Operators

1. Operating costs are reduced by avoiding duplication of facilities and by concentrating the clerical and platform expenses of all carriers.
2. The territories served by all carriers are extended by the establishment of arrangements for interchanging freight among carriers, by through joint route arrangements and through rates.
3. The carriers are able to join in the maintenance of solicitation and traffic development services beyond the reach of the individual carriers, through the employment of traffic representatives or salesmen.
4. Advertising and publicity programs impossible if the carriers act individually may be financed by joint action.
5. Shippers are given a definite central terminal to which freight may be delivered for a large number of destinations, and the carriers are relieved of the necessity of keeping the locations of a number of individual terminals constantly in the minds of prospective shippers.
6. Unnecessary duplications of pick-up and delivery services at the plants or stores of the same shippers and consignees by several or a number of operators serving different routes are avoided. One truck can be used to make the required pick-ups or deliveries.
7. Trucks can be operated with loads nearer their capacities in pick-up, line haul and delivery operations by avoiding duplications of services.
8. A uniform policy and practice with respect to pick-up and delivery practices may be established and observed by the carriers acting as a group which would be impossible if the carriers acted individually. Unjust and unreasonable discrimination among shippers and consignees may be avoided.
9. The operators of motor freight carrier routes through central truck terminals are able to publish and adhere to uniform schedules of rates fair to their patrons and themselves.
10. Motor carriers functioning through cooperative central terminals are able to acquire better facilities or in more desirable locations and to coordinate their services with warehousing, steam railroad, electric railway and steamship transportation facilities.

Cooperative Terminal Benefits to Consignors and Consignees

1. Shippers and consignees are sure of a definitely established motor freight service maintaining regular schedules serving a wide expanse of territory over a number of clearly defined routes.
2. Uniform rates and standardized billing practices are assured, thus eliminating discrimination and uncertainty with respect to charges.
3. Shippers know where to deliver freight and where to call for it, or where to call for freight to be picked up or delivered.
4. Uniform liability for loss, damage or delay is assured the owners of goods transported by the carriers.
5. Standardized shipping papers having definite contractual provisions and uniform interpretation are assured.
6. Through rates over joint routes make long distance service practicable without anxiety as to what happens to the shipments at the interchange points.
7. Shippers and consignees are enabled to use motor freight transportation service in conjunction with steam railroad, electric railway, express and steamship transportation services and in conjunction with warehousing with greater certainty and at less expense.

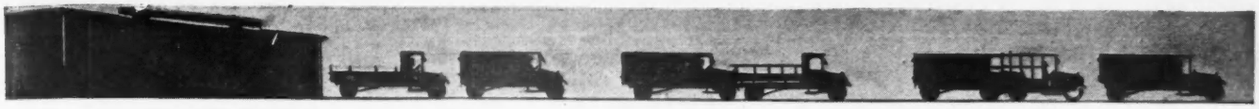
NEW TRUCK SALES

Complete figures for December, 1928,

	Acme	American La France	Atterbury	Autocar	Brockway	Chevrolet	Commerce	Diamond T	Dodge Bros.	Federal	Ford	Garford	G. M. C.	Gotfredson	Gramm	Indiana	International	Larrabee	Mack	Pierce-Arrow	Relay	Reo	Republic	Schacht	Selden	Service	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Total Sales by States Including Miscellaneous
ALA.....Dec.						131			21	6	121		11				36		3			3								1			335
ARIZ.....Dec.						8			21		38		6				12			6	4	2							2		2		102
ARK.....Dec.						16			1	1	16		2				6					1											43
CAL.....Dec.				6		31		2	165	12	722		63				24		19	1		78	1			19	4	11	3	21	1	1,250
COL.....Dec.						10			9		26		6	1			6					3							1			62
CONN....Dec.				4	2	25		3	46	2	106		26				12	3	19	3	1	27						4	4	6	9		309
DEL.....Dec.						4			4		33		3				7			1		1								2	2		58
Jan.				1		14			5		35		4				4		1			1									2		68
D. C.....Dec.*																																
FLA.....Dec.						56			14	1	171		5			5	9		5			4								3	1	275
GA.....Dec.						27			5		36		1				1													2	6		78
IDA.....Dec.						8			3		23		3				2					1								1	2		43
ILL.....Dec.		1		2		44		44	57	5	357		20	1		1	57		16		2	18				2	2		5	29		685
Jan.		1		8		400		146	198	8	982	3	121	21		24	313		40	1		72	4			2	7	4	3	11	33	5	2,601
IND.....Dec.				1		152		3	42	2	306		29		2	18	59					25				1		7	1	5	1	2	665
IA.....Dec.						43		1	58	5	256		27	1		2	109					23						1			3	3	542
KAN.....Dec.						15		1	7		35		2				5					5											70
KY.....Dec.						59		3	27	1	122		16			1	29		1		1	13		1		3			4		6		295
LA.....Dec.						10			12	1	126		7				20		2			6											184
ME.....Dec.						5			1		13		1				2		1			2							2				28
MD.....Dec.	1	1		8		27	1	7	17	5	147		18			1	15		28			12	1			2	1	2	3	15	1	320
MASS.....Dec.				14	6	24		3	52	4	314		46				36		39	2		40			1		2	4	3	1	14		609
MICH.....Dec.	6			7	2	138		7	95	26	889		65	11			74		16	1		76	3					1	8	8	3	5	1,486
MINN.....Dec.						42			15	4	184		8				33		2			9							2	1	4		307
MISS.....Dec.						3			5		52						18													3			81
MO.....Dec.				1		37		3	33	1	174		28			1	34					13							1	4	3		340
MONT.....Dec.						25			7		9		2				12		1	1		1		1						1			57
Jan.						55			21	2	142		6				29					8	1							2	3	1	278

*—D. C. figures not available as yet.

Figures in this table are compiled by R. L. Polk & Company, of Detroit, except Illinois, which is compiled by the Automobile Sales Record Corp., of Trenton. Readers desiring town



BY MAKES AND STATES

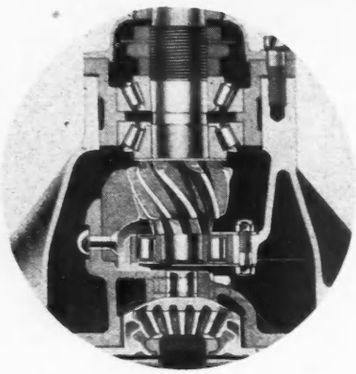
and Partial Reports for January, 1929

	Acme	American La France	Atterbury	Autocar	Brockway	Chevrolet	Commerce	Diamond T	Dodge Bros.	Federal	Ford	Garford	G. M. C.	Gotfredson	Gramm	Indiana	International	Larrabee	Mack	Pierce-Arrow	Relay	Reo	Republic	Schacht	Selden	Service	Sterling	Stewart	Studebaker	Whippet	White	Willys-Knight	Total Sales by States Including Miscellaneous
NEB.....Dec.						55			13		74		11			3	40		1			4											201
NEV.....Dec.									2		1																						3
N. H.....Dec.						5					14		3				3		2			2							1	1			31
N. J.....Dec.	2	4		24	12	93	2	10	124	15	361		71	4			42	1	66	6		80		4	1		13	8	7		34		1,028
N. M.....Dec.						33			9		17		1			1	8													1			71
Jan.						31			20	3	36		3			2	15					4								1	2		118
N. Y.....Dec.	1	63		18	67	88		28	144	14	476	2	68			1	58	7	58	5		53	2		4	3	8	21	5	5	28	3	1,266
N. C.....Dec.				1		77			20	1	126		5			1	5					4	1					3	1	5	3		258
Jan.	7			1		204			68	4	375		42			5	26		3			11	1					1	1	3	3		775
N. D.....Dec.						40			4		11		4				24					2										1	89
Jan.						63			8	1	79		9				51					3											217
OHIO.....Dec.	7			10	1	379		23	155	19	724	4	88	8	3	24	154		31	2	1	69	2	13	3		2	5	9	25	45	13	1,884
OKLA.....Dec.						50		3	76	3	370	1	16				58		10			6			1				4	21	4		628
ORE.....Dec.						2			9		38		5				6					1								1	6		74
PA.....Dec.	4	2	6	57	44	207	4	25	218	21	789	8	123	8		2	145	2	63	2	4	94	7		5		21	25	17	18	48	4	2,039
R. I.....Dec.					1	8		1	17	3	43		11				5		2			11						2	1		1	1	110
S. C.....Dec.						32			7	1	60						2		1			1								2			106
S. D.....Dec.						15			4		25		4				11					1								2			64
Jan.						47		2	14	1	105		9			1	56		4			7											249
TENN.....Dec.						11			12	1	30		4				3					2	1						2				67
TEX.....Dec.				9		167			83	2	439		33			4	81		25			35	1					2	4	4	7	1	908
UTAH.....Dec.						3			6		21		4				2					1											38
Jan.						23			19		79		4				14		6			5							2	1	1		156
VT.....Dec.									7		19		4									1							2				33
VA.....Dec.	1			1	1	67		1	35	3	241		24			2	24		6		1	6	7					1	1	2	8		440
Jan.				2		86		1	45	10	274		17			6	37		3			13	10					1	1	3	12		523
WASH.....Dec.						8			8	2	56	1	6				8		3				3								3	1	111
W. VA.....Dec.	3					34		2	39	1	119	1	12			4	32		1			13		1				4	2		2	1	274
Jan.						45		1	15	1	121		11				26					11							1	2	2		243
WIS.....Dec.						46		6	26	4	253		15				23		4			12					5	1	1	4	2		416
Jan.				1		85		8	38	8	430		23				27		3	1		18					10	5	3	3	1	4	692
WYOM.....Dec.						11			13		18		5				15					1											64
TOTAL.....Dec.																																	
Sales by Makes	25	71	6	163	136	2,371	7	176	1,748	166	8,501	17	912	34	5	71	1,367	13	424	29	14	762	28	19	15	7	74	96	97	138	314	37	18,427

is compiled by the Robinson's Advertising Service, of Springfield; and New Jersey, which and county lists of owners in any section may address any of these three companies.

GOLD CROWN POWERS

REO



Rear axle of 1½-ton truck showing straddle mounting of pinion

Below — Model FA equipped with stake body and all-steel cab

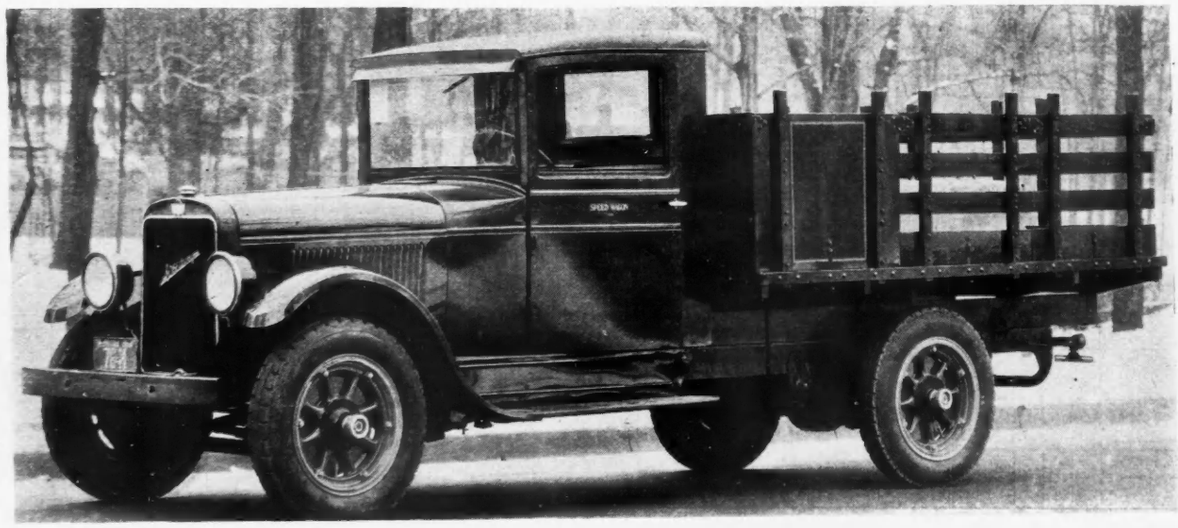
A NEW six-cylinder L-head engine which develops one-third more power than the F-head engine which it replaces is incorporated in the new F and G series of Reo trucks and buses. The line comprises three 1½-ton models, two 2-ton, two 3-ton, a 2 cu. yd. dump job and two buses.

All models have longer wheelbase, 4 in. in eight models and 13 in. for the two remaining. A four-speed transmission, with direct on fourth, is employed in all chassis including the 1½-ton, which formerly had a three speed unit. Hydraulic four-wheel brakes are continued. Steering gears are new, being of the worm and nut type.

The new Reo truck engine, called "Gold Crown," was designed to provide passenger car flexibility together with those features essential for long, continued, high-power output in truck operation. Cooling capacity is increased by providing a large pump and fan and the lubricating oil is cooled by radiating fins cast integral with the aluminum oil pan. Pistons are aluminum alloy.

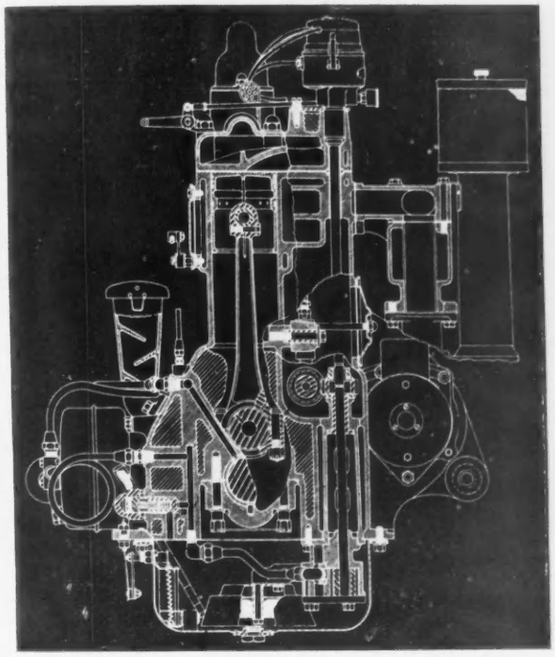
A seven-bearing crankshaft is employed and it is provided with passages for pressure lubrication. The camshaft is driven by chain.

Compared with the F-head engine used in previous models, the "Gold Crown" engine has 3/16 in. more

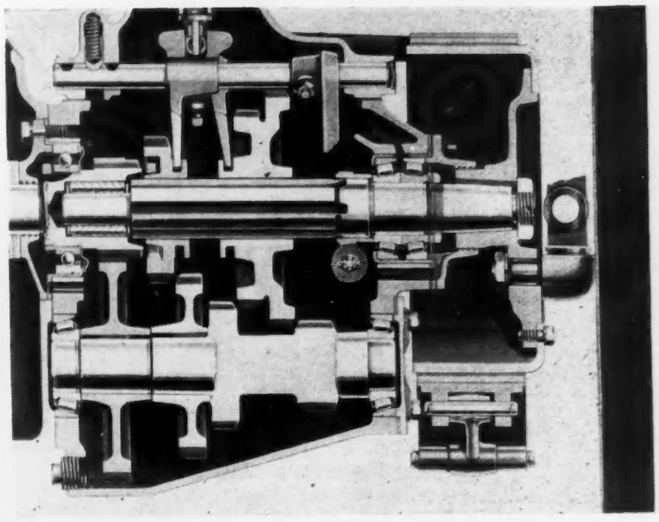


REO F AND G SERIES

L-Head Powerplant, Rated at 67 Hp., and Four-Speed Transmission, Embodied in 10 New Chassis



The "Gold Crown" engine has offset combustion chambers. The oil pump screen is an inverted bell. Oil filter and air cleaner are standard equipment



Four-speed transmissions are used on all Reo 1½ to 3-ton trucks. Anti-friction bearings are employed on clutch shaft, main shaft and counter shaft. Lubricant is fed into front and rear bearings and returns to case by gravity. Leakage is prevented by labyrinth packing

bore and the same stroke, 3⅜ by 5 in. instead of 3 3/16 by 5 in. Power has been increased from 50 hp. at 2000 r.p.m. for the engine formerly used to 67 hp. at 2800 r.p.m for the new design.

Metric thread spark plugs, which are much smaller than the ⅞ S. A.E. size, have been adopted. This type of plug is used in several passenger car engines but it is uncommon in the truck field.

Rear axles are unchanged except on the 1½-ton models in which heavier construction is used and a straddle mounting of pinion is employed. Semi-floating axles are embodied in all models except 3-ton and the 21-passenger bus, which are full-floating.

Cabs, which are interchangeable on all truck models, are of all steel construction. The assembly is built up of bolted steel plates which may be replaced in case of damage. They are produced by Heinz Mfg. Co.

Specifications of New Reo F and G Series

Model	FA	FE	FF	FC	FD	GA	GC	GD	FB	GB
Capacity	3000	3000	3000	4000	4000	6000	6000	2 cu. yd.	12-pas.	21-pas.
Price	$1,295	$1,395	$1,395	$1,595	$1,695	$2,035	$2,140	$1,985	$1,455	$2,200
Wheelbase	137	152	156	152	168	163	179	134	156	179
Weight, chassis										
Engine	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own
size	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3⅜x5	6-3 ⅜x5
displacement	268.3	268.3	268.3	268.3	268.3	268.3	268.3	268.3	268.3	268.3
horsepower	67	67	67	67	67	67	67	67	67	67
Carburetor	Schebler	Schebler	Schebler	Schebler	Schebler	Schebler	Schebler	Schebler	Schebler	Schebler
feed	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum	Vacuum
Gasoline tank	20 gal.	20 gal.	20 gal.	20 gal.	20 gal.	20 gal.	20 gal.	20 gal.	30 gal.	42 gal.
Ignition make	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy
Generator and starter make	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy	Delco Remy
Radiator type	Cellular	Cellular	Cellular	Tubular	Tubular	Tubular	Tubular	Tubular	Cellular	Tubular
circulation	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump	Pump
Clutch	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate	Plate
Transmission	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own
speeds	4	4	4	4	4	4	4	4	4	4
mounted	unit	unit	unit	unit	unit	unit	unit	unit	unit	unit
Propeller shaft	Single	2-piece	2-piece	2-piece	2-piece	2-piece	2-piece	Single	2-piece	2-piece
Rear axle make	Own	Own	Own	Own	Own	Own	Own	Own	Own	Own
type	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating	bevel semi-floating
ratio	5.2 to 1	5.2 to 1	5.2 to 1	5.77 to 1	5.77 to 1	6.22 to 1	6.22 to 1	7.0 to 1	5.2 to 1	6.22 to 1
Drive and torque	Springs	Springs	Springs	Springs	Springs	Springs	Springs	Springs	Springs	Springs
Steering gear make	Hannum	Hannum	Hannum	Hannum	Hannum	Hannum	Hannum	Hannum	Hannum	Hannum
Service brake	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic	4-wheel hydraulic
Hand brake	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft	driveshaft
Springs front	38 x 2¼	38 x 2¼	38 x 2¼	38 x 2¼	38 x 2½	38 x 2½	38 x 2½	38 x 2½	38 x 2¼	38 x 2½
rear	50 x 2½	50 x 2½	54 x 2½	50 x 2½	50 x 2½	50 x 3	54 x 3	50 x 3	54 x 2½	54 x 3
Chassis Lubrication	Meyers	Meyers	Meyers	Meyers	Meyers	Meyers	Meyers	Meyers	Meyers	Meyers
Wheels	Cast	Cast	Cast	Cast	Cast	Cast	Cast	Cast	Cast	Cast
Tires, front	32x6	32x6	32x6	30x5	30x5	32x6	32x6	32x6	32x6.75	34x7.50
rear	32x6	32x6	32x6	30x5 dual	30x5 dual	32x6 dual	32x6 dual	32x6 dual	36x8.25	34x7.50
Frame	6 1/16x3/16	6½x7/32	6½x7/32	6½x7/32	6 3/16x¼	7x¼	8x7/32	7x¼	6½x7/32	8x7/32

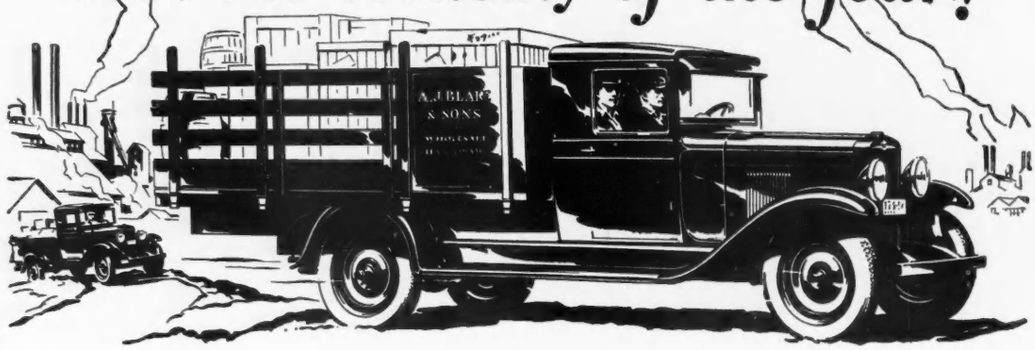
for Economical Transportation

CHEVROLET

now-

Six Cylinder Trucks

with the economy of the four!



CROWDED traffic conditions today demand six-cylinder performance—with its greater flexibility, greater reserve power, higher speed and swifter acceleration. And now—for the first time in commercial car history—this desirable six-cylinder performance has been made available with the economy of the four. For the new six-cylinder Chevrolet trucks are not only offered in the price range of the four—but they are as economical to operate as their famous four-cylinder predecessors! Both the Light Delivery and the 1½ Ton Utility Chassis are available with an unusually wide selection of body types—and among them is one exactly suited to your requirements. See your nearest Chevrolet dealer. He will gladly arrange a trial load demonstration—load the truck as you would load it, and drive it over the roads your truck must travel in a regular day's work.

CHEVROLET MOTOR COMPANY, DETROIT, MICHIGAN
Division of General Motors Corporation

Sedan Delivery, $595; Light Delivery Chassis, $400; 1½ Ton Chassis, $545; 1½ Ton Chassis with Cab, $650. All prices f. o. b. factory, Flint, Mich.

A SIX IN THE PRICE RANGE OF THE FOUR

AFTER HOURS

Show

Expansion in the truck market, the great growth in interest in truck transportation and almost phenomenal development within the truck industry are just a few of the reasons that substantiate the judgment of the National Automobile Chamber of Commerce in deciding to sponsor a motor truck show the latter part of this year. They are likewise among the reasons that augur the success of the exhibit if it is as extensively promoted as it deserves to be.

One point in the matter gives cause for particular approbation: the decision to conduct the show entirely apart from any passenger-car exhibit. We won't say that disregard of this point was responsible for past unsuccesses, but there is reason to believe that it was a contributing factor. This year the truck will not play second fiddle; it will play first violin, and solo at that.

Operators will be interested to know that a convention program will be held concurrently with the show. That the convention addresses and discussions will be of vital importance to operators needs no emphasis, because the sponsors of the affair are well aware that the convention magnet must be powerful enough to attract and to hold.

Truck manufacturers will doubtless take advantage of the opportunity to hold dealer meetings.

Cleveland appears to be a city much favored for the show, with Chicago its principal competitor, but no matter where it is held, it is safe to predict that no effort will be spared to make the show an event so successful as to insure for it perennially a prominent place on the truck industry's calendar.

Maintenance

Truck design has advanced so rapidly during the last few years, and the changes have been so pronounced, that a logical question which we might ask ourselves because of its vital importance is "Have maintenance methods kept pace with this progress?"

With more than 3000 trucks to take care of, J. F. Winchester, supervisor of motor vehicles for the Standard Oil Co. of New Jersey, will unquestionably qualify as a man who can speak authoritatively and dispassionately on the subject of maintenance. It is his feeling that maintenance is not standing still while truck design improves; that, on the contrary, methods of repairing chassis units and equipment designed for this work have advanced with chassis design.

Speaking before the Pennsylvania Section of the Society of Automotive Engineers a short time ago, Mr. Winchester told of present-day bearing equipment which has reduced the time of fitting a set of main and connecting rod bearings from 35 hours a few years ago to from 13 to 14 hours; of hoists and other handling equipment which have greatly reduced the labor involved in removing and replacing units, and so on with other items; of painting equipment which has cut down the cost of painting and reduced idle truck time. Etc., etc.

Taking up each of the chassis units, such as engine, transmission and axles, he compared present cost of an overhaul with the 1922 figure, and indicated that savings of some 40 per cent—running to 60 per cent in some cases—had been achieved.

In a fleet maintenance budget running into six figures, these savings are impressive. They are no less important to owners of smaller fleets. Which suggests the idea that it might be worthwhile for every fleet operator to take stock of his maintenance methods and equipment. No progressive fleet owner can afford to neglect developments—time and money-saving developments—such as have been evolved in the field of maintenance.

Agriculture

We have heard much about the agricultural problem and about relief measures. The recognition given the situation by politicians and the press is convincing proof that the farmer has a plight and that he needs some form of assistance. While we are sympathetic, we cannot help wondering that were it not for the motor truck the farmer's economic status might be sorrier even than grange orators and corn-belt and wheat-belt senators and congressmen have painted it in their most loquacious moments. The average American farmer, if he still had to hitch his wagon, and his fate, to a horse plodding his weary way to a not distant market, might be reduced shortly to the dire extremity of eating his charger to keep the well-known body and soul together. In this circumstance we can only vaguely surmise the mental and belly anguish of a farmer irrevocably committed to the dietetic theory of vegetarianism.

The truth is that the motor truck did come before the agricultural industry at an opportune time, and while it could not lead farmers into a land of plenty (cash, not crops), it certainly furnished them with a vehicle for extending their local markets and thus staving off economic disaster. This extension of markets continues and, it is safe to say, will persist.

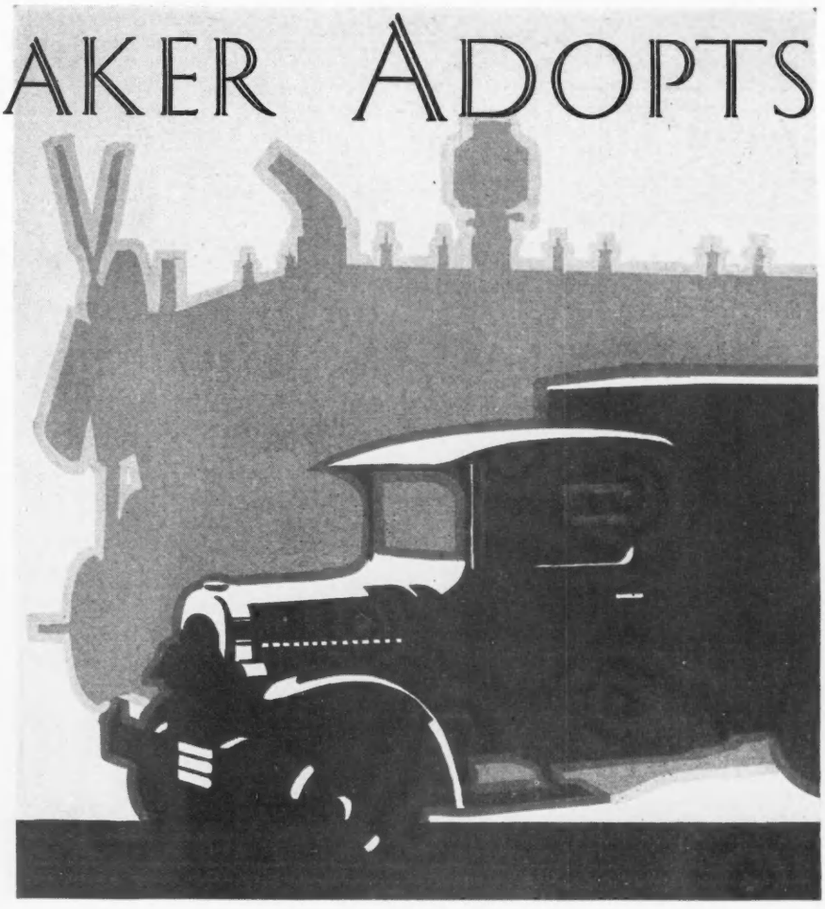
According to Wells A. Sherman, of the Bureau of Agricultural Economics, U. S. Department of Agriculture, modern transportation by motor truck is offering new opportunities for eastern farmers in competing with long rail hauls from distant commercial producing areas. Highway improvement and truck transportation, according to this same authority, are making it possible for many eastern farmers to grow some products which were out of the question when these farmers were dependent upon wagon transportation, and are enabling nearby producers to meet competition from distant producing areas that have been assisted by refrigeration developments.

Figures compiled by the Corn Belt Farm Dailies show that 12,193,058 cattle, calves, hogs and sheep were hauled by truck to 17 major markets in 1928, an increase of 46 per cent as compared with the 8,393,101 head hauled in the year 1927.

Agriculture is making rapid progress in motorizing its transportation and is perhaps deriving thereby some of the relief it seeks in other quarters and by other means.

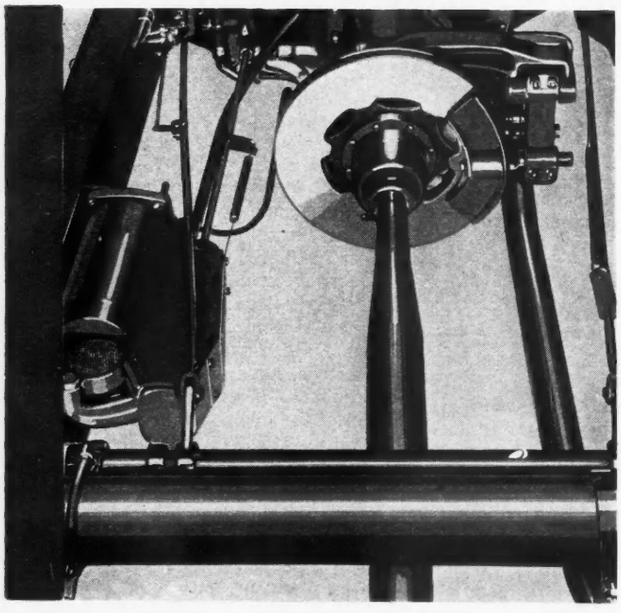
STUDEBAKER ADOPTS

Three Chassis for Truck and Bus Service Incorporate a 3½ x 4⅜ in. Engine Developing 115 Hp.



THE engine incorporated in the new Studebaker truck and bus chassis has many features of interest in addition to the fact that it is a straight-eight developing 115 hp. The basic design is the same as that of the President passenger car engine which made the 30,000-mile records on the Atlantic City Speedway last year. Among the changes in that design are: a duplex carburetor and down-draft intake manifold which give the effect of two carburetors and two intake manifolds, each serving four cylinders; a 2-in. flat leather fan belt which also drives the water pump and generator, which are mounted in tandem on an accessory shaft; an automatic choke which opens against light spring pressure when the engine starts to fire. A dual ignition distributor with two sets of breaker points, each set fir-

Westinghouse vacuum amplifier for service brakes is attached to frame on left. The disk type driveshaft brake is at rear of transmission

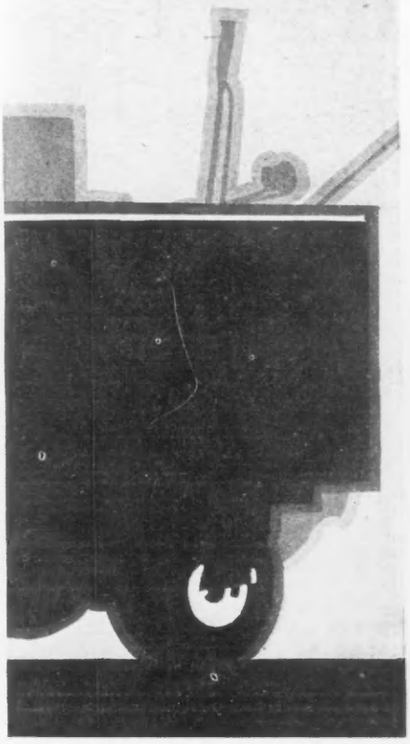


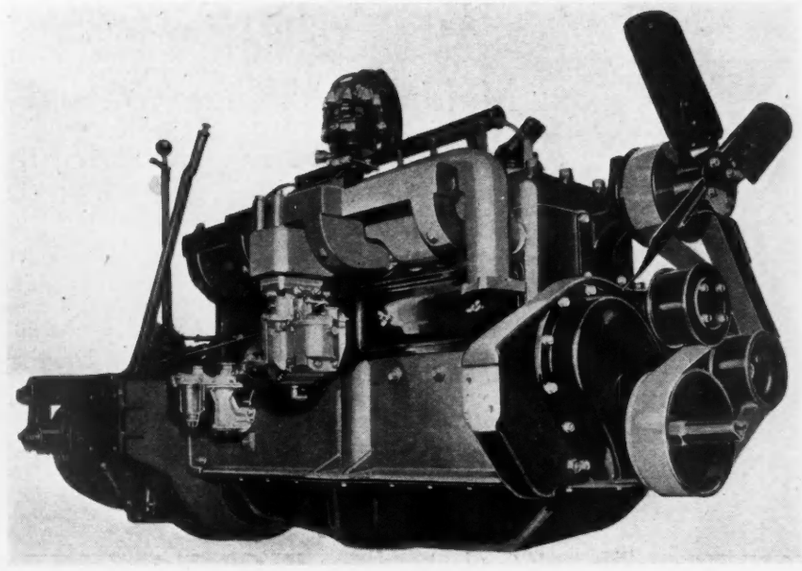
Specifications of Studebaker Trucks and Bus Chassis

Model	77 Junior	88 Special	99 Heavy Duty
Capacity	2½	3	3½
Price, chassis	$2,585	$2,985	$3,385*
Wheelbase, standard	158	184	184
Engine, Make	Own	Own	Own
Size	6-3½x4⅜	6-3½x4⅜	6-3½x4⅜
Displacement	377 cu. in.	377 cu. in.	377 cu. in.
Hp. @ 3200	115	115	115
Carburetor, make	Stromberg Duplex	Stromberg Duplex	Stromberg Duplex
Feed	Pump	Pump	Pump
Ignition, make	Delco-Remy	Delco-Remy	Delco-Remy
Generator and Starter, make	Delco-Remy	Delco-Remy	Delco-Remy
Cooling Type	Long	Long	Long
Circulation	Pump	Pump	Pump
Temperature control.			
Clutch, make			
Type	Double disk	Double disk	Double disk
Transmission, make	Own	Own	Own
Speeds	3	3	4 (a)
Mounted	Unit	Unit	Unit
Universals, make	Spicer	Spicer	Spicer
Number	3	3	3
Rear Axle, make	Eaton	Eaton	Eaton
Type	Bevel semi-floating	Bevel semi-floating	Bevel semi-floating
Ratio standard	5.11 to 1	5.11 to 1	5.11 to 1
Ratio optional	4.88, 5.66, 5.3 to 1	4.88, 5.66, 5.3 to 1	4.77, 5.5, 6.125 to 1
Drive and Torque	Springs	Springs	Springs
Steering gear, make	Ross	Ross	Ross
Service Brake Make	Bendix Westinghouse	Bendix Westinghouse	Bendix Westinghouse
Auxiliary	Vacuum	Vacuum	Vacuum
Hand Brake Location	Driveshaft	Driveshaft	Driveshaft
Type	Disk	Disk	Disk
Springs, front	38x2½	38x2½	38x2½
Rear	56⅜x3	56⅜x3	56⅜x3
Tires, single rear front	34x7	7.50/20	7.50/20
Rear	34x7	36x8	36x8
Dual rear, front	6.75/20	7.50/20	7.50/20
Rear	6.75/20	7.50/20	7.50/20
Frame	8 1/16x 3x7/32	8 1/16x 3x7/32	8 1/16x 3x7/32
Width	41⅛	41⅛	41⅛
Length, dash to end of frame	168⅝	194⅝	194⅝

* With dual rear wheels $3,485. (a) 3 or 4 speed optional.

STRAIGHT EIGHT





Studebaker straight eight engine which is suspended at four points embodies duplex carburetor, dual down-draft intake manifold and flat fan belt which also drives generator and water pump

ing four cylinders, which was embodied in the President models, is retained.

Bore and stroke of the engine are 3½ by 4⅜ in. respectively, giving a piston displacement of 337 cu. in. and an S.A.E. rating of 39.2 hp. The engine develops 115 hp. at 3200 r.p.m.

The crankshaft is fully machined and is supported in five interchangeable non-adjustable main bearings. It is balanced statically and dynamically and is drilled for oil passages. Lubrication is pressure type to main, connection rod and camshaft bearings. The camshaft is mounted in six bearings.

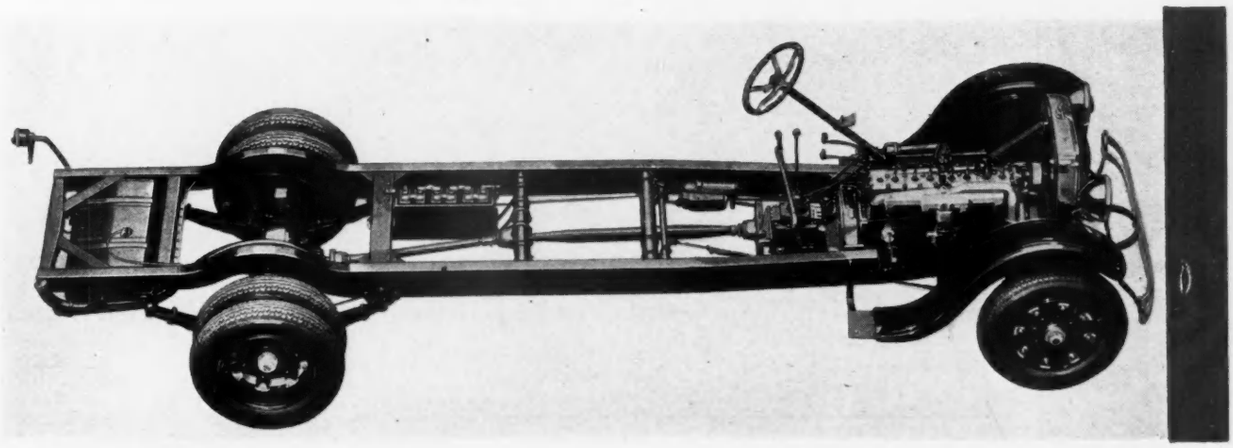
Three models, each of which is designed for high speed truck service as well as bus use, comprise the new line. They are: Model 77 of 2½-ton capacity having 158-in. wheelbase is priced $2,585 with either single or dual rear wheels. This is designated the Junior bus chassis. Model 88 rated at 3 tons has wheelbase of 184 in. and the corresponding bus chassis is called the Special. Price is $2,985 for chassis and $6,595 with Seminole 22-passenger observation bus body. The Heavy Duty chassis, Model 99, with 3½-ton capacity, is priced $3,385 with single rear wheels; $3,485 with dual rear wheels, and $6,095 when equipped with two-passenger street car bus body.

Both Heavy Duty chassis, whether for truck or bus use, are equipped with either three or four-speed transmissions at the buyer's option. There are likewise three optional rear axle ratios in each of the three models.

Although general chassis construction is much like that of the preceding six-cylinder chassis, many parts have been strengthened to care for the larger engine, greater carrying capacity and

(Please turn to page 58, please)

View of chassis. Brake cross shaft and propeller shaft center bearing are attached to tubular cross members



EASY DISASSEMBLY FEATURES FULLER

New Multiple Disk Clutch for Heavy Duty Trucks Provides Positive Lubrication for Pilot Bearing

A NEW type of multiple disk clutch designed specifically for heavy duty truck use has been developed by Fuller & Sons Mfg. Co., Kalamazoo, Mich. The design provides positive lubrication for the pilot bearing, and removal from clutch shaft without an arbor press, in addition to overload capacity.

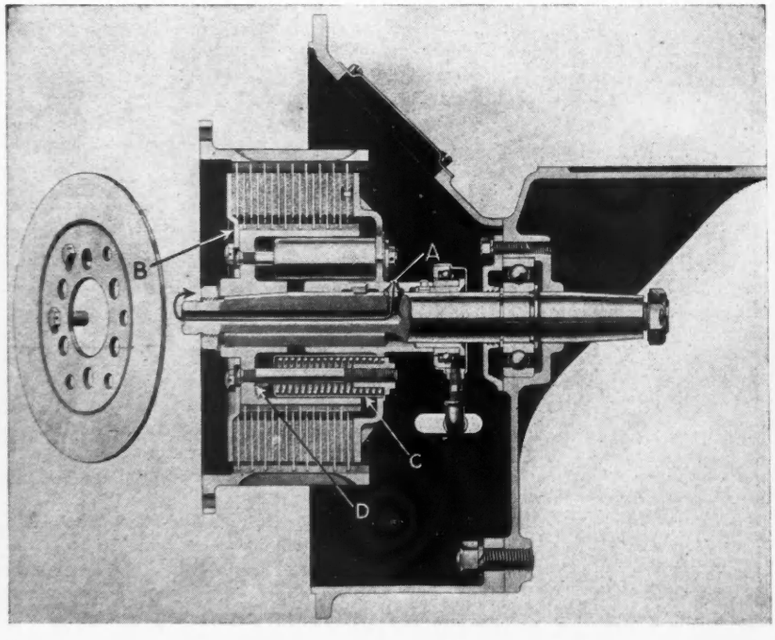
Disassembly of the clutch is facilitated by the use of a heavy steel stamping for the front pressure plate which attaches to the hub with six ⅜-in. cap screws. After these cap screws have been backed out part way, the retainers of the six coil springs, used in place of a single large pressure spring, bottom against the hub allowing the free removal of the cap screws and the complete set of drive and driven disks. The hub moreover has been fitted to the clutch shaft by a keyed taper, held in place by a large nut at the end of the shaft, so that the entire clutch may be removed from the shaft without the use of an arbor press.

Positive lubrication for the pilot bearing is provided by inserting a Zerk fitting at the end of a drilled passage in the clutch shaft. A longitudinal slot in the rear pressure plate hub provides clearance for this fitting so that it will not contact with the hub in the release or engaged position or when the facings are worn down. The clutch throwout bearing is also positively lubricated by a fitting projecting through the side of the bell housing.

Overload capacity is provided by increasing the 8-in. normal size of the clutch to 8½ in., and by providing for the use of 18 facings in the largest size clutch.

Mention has already been made of the six-coiled pressure springs in place of a single large one, the object being a better distribution of pressure. To provide against the plate cocking or binding in the event that the springs are not adjusted with an equal amount of tension, a long pressure plate bearing is provided on the shaft. Another interesting feature is the use of toothed internal as well as external drive. Driving disks have teeth which engage with grooves on the inner surface of the clutch drum and driven disks have teeth which engage with grooves on the outer surface of the hub.

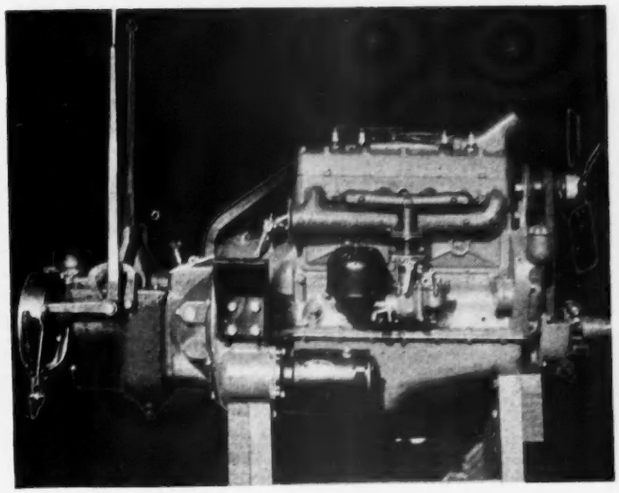
Crimped inner disks and slotted clutch drums, two features common to Fuller clutches for a number of years, are also found in this unit.



Cutaway view of new Fuller clutch for heavy duty truck use. The pilot bearing is positively lubricated through a drilled passage in the shaft to which a Zerk fitting A is attached. Throwout bearing is lubricated through a fitting in a slot in the side of the case. To replace disks loosen six cap screws in front pressure plate B. Before the cap screws are out of the threads the six spring retainers C bottom on the hub at D, relieving spring pressure on the plate. This permits removal of the plate and disks. The hub is attached to the shaft by a keyed taper

FAGEOL ENTERS LIGHT DUTY FIELD

First 1-Ton Model is of Over-Size Construction and Weighs 3675 lb.



Unit assembly of four-cylinder Waukesha XA engine, Brown-Lipe clutch and four-speed transmission and drive-shaft brake

WITH the introduction of the Fageol Cub, which is an over-size 1-ton truck chassis, Fageol Motors Co., Oakland, Cal., has increased its capacity range of models from 1 to 10 tons. Powered by a four-cylinder Waukesha, the Cub is equipped with a four-speed Brown-Lipe transmission and Lockheed hydraulic four-wheel internal brakes. The engine is mounted at three points on gum rubber pads. Aluminum pistons are used.

Rear spring bracketing of the Club departs from usual practice, the construction being such as to bring about low frame height. The rear bracket is arch shaped and is riveted to the side of the frame. The shackle bolt is located in the bracket in line with the top of the frame. Unlike the rear, the front bracket is smaller and consists of a base riveted to the frame and an arm that extends over the spring eye to support the outer end of the spring bolt. All spring and spring shackle bolts are 1¼ in. in diameter.

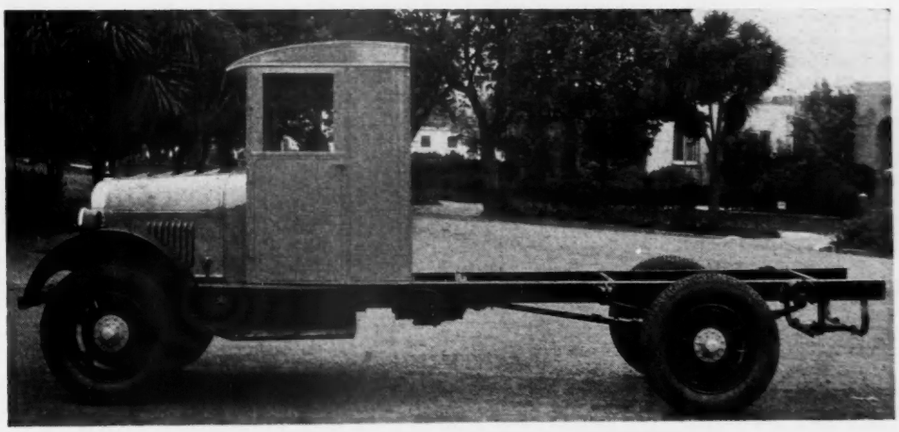
A large self-aligning ball bearing mounted in a rigid bracket which in turn is riveted to the frame cross-member

(Turn to page 60, please)

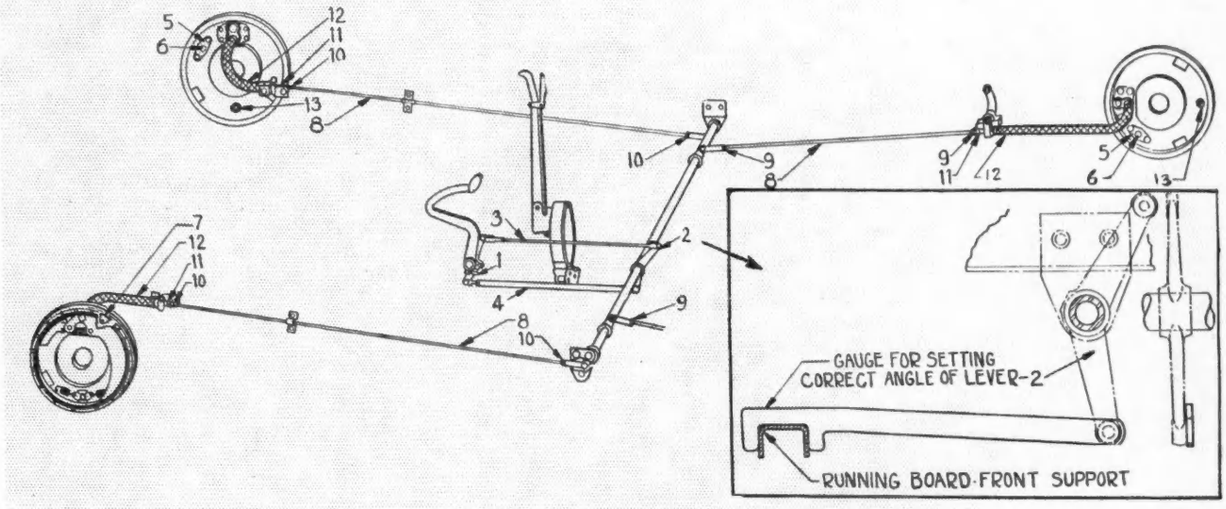
Specifications of Fageol CUB

Model	100 "Cub"
Capacity	1-1½
Price	$1300
Wheelbase, standard	144 in.
Extra cost, optional	152 or 168 in.
Weight, chassis and cab	3675
Engine, make	Waukesha XA
Size	4—3½ x 4½
Displacement	173 cu. in.
Carburetor, make	Zenith 104½
Feed	Stewart vacuum
Gasoline tank, location	under seat
Capacity	20 gal.
Ignition, make	Delco Remy
Cooling, type	tubular
Circulation	thermo-syphon
Capacity	6 gal.
Generator and starter, make	Delco Remy
Clutch, make	Brown-Lipe
Type	multiple disk dry
Transmission, make	Brown-Lipe
Speeds	4
Mounted	unit
Universals, make	Spicer
Number	3
Rear Axle, make	Timken
Type	bevel
Ratio standard	5 4/7 to 1
Drive	Springs
Torque	Springs
Steering gear, make	Ross
Service brake, make	Lockheed hydraulic four-wheel internal
Hand brake, location	driveshaft
Type	external band
Springs, front	32¾x2½ in.—6 leaves
Rear	50x2½ in.—9 leaves
Wheels, make	steel spoke
Tires	32x7.00
Frame	pressed steel
Depth	5 in.
Flange	3 in.
Thickness	3/16 in.
Overall length of chassis	17' 8 5/16"
Overall length of frame	17' 2 13/16"
Length, cab to center of rear axle	73½"
Length, cab to end of frame	120"
Turning radius	23' 8"

One-ton Fageol Cub equipped with enclosed steel cab. Note rear spring brackets, fenders, tire carrier and five-spoke wheels



GMT T-11 & T-19

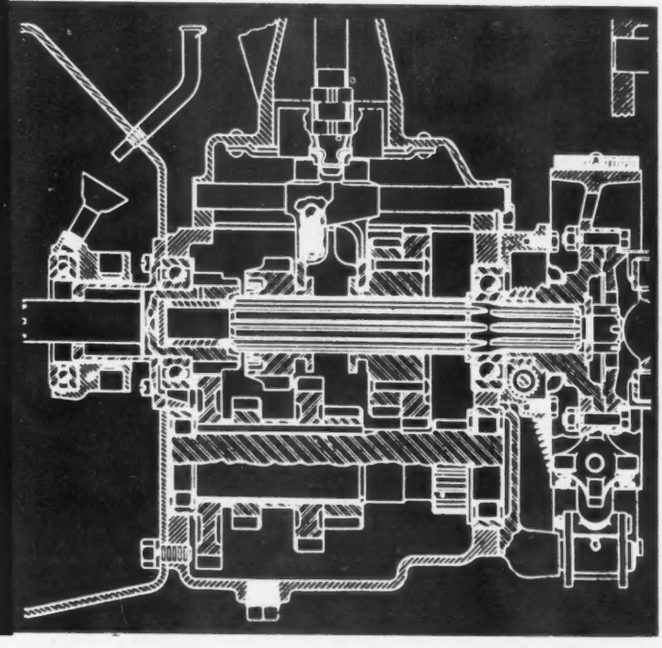


CHANGES in General Motors Truck Models T-11 and T-19 which are of most interest to maintenance men are adoption of Steeldraulic brakes on the former and Bendix three-shoe brakes on the latter, and employment of Hotchkiss drive instead of torque tube construction on both models. A contracting band type of transmission brake is used on the two chassis, the principal difference being in the adjustment.

Rear axle of the T-19 has an adjusting screw which furnishes additional support for the ring gear when power is applied suddenly. This screw, which does not touch

Lay-out of Steeldraulic Brakes on Model T-11

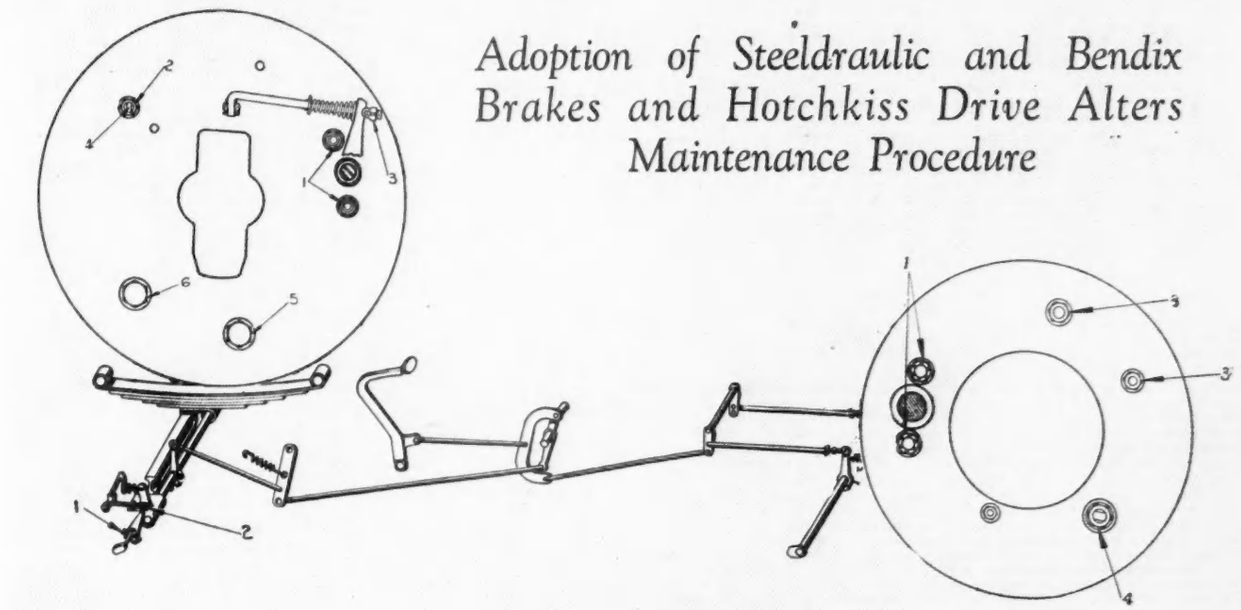
Brake rods and levers are set at factory and do not require adjustment except when damaged. To adjust brake shoes proceed as follows: Jack up all four wheels. Remove adjusting plate on front and rear brakebacking plates. Remove inspection hole cover on brake drums between spokes. Turn screw 6, to obtain clearance of 3/64 in. between lining and drum. Measure with thickness gage through hole in brake drum. Turning screw clockwise makes clearance less. A hair pin spring prevents this screw from turning. If brakes have been holding evenly, tighten adjusting screw same number of turns at each wheel. After long service adjust position of brake adjuster stop, 13, which governs clearance between flanged section of shoe and brake drum. Remove cover on hole in drum. Turn wheel until inspection hole is directly over stop. Turn adjuster stop by turning screw which holds stop to backing plate until 3/64 in. feeler is tight between shoe and drum. To adjust brake lever: Set pedal stop to provide clearance of ½ in. between pedal and toe board. Adjust brake rod 4, until lever 2 is at angle of 30 deg. to the rear. This measurement may be set by gage, as shown. With pedal against stop end with lever at this angle adjust brake rod 3 to fit, then connect pedal. To equalize brakes after relining: Relieve tight brake by turning adjusting screw, 6, counter-clockwise. One or two notches should be enough. In backing off adjustment turn screw three or four notches more than necessary then turn clockwise to take up slack. Check travel of brake shoes by depressing pedal enough to leave a little clearance between lining and drum. Measure clearance between adjuster and anchor pin through inspection hole in drum. To lengthen or shorten rods: Back off jam nuts and loosen fitting at end of cable ¼ turn, holding end of cable with wrench. Rods can be turned with pliers without disconnecting yoke from lever. Hand brake adjustment: Set band to same clearance on either side. Brake should stall engine when brake lever has two or three notches to go. Lining of Service brakes is of molded "hard" type. The brakes have a powerful self-energizing action and this may become too severe if a "soft" lining is used. Do not reline brakes. Replace with exchange relined shoes



Section of three speed transmission of Model T-11. Countershaft is stationary

SERVICE DATA

Adoption of Steeldraulic and Bendix Brakes and Hotchkiss Drive Alters Maintenance Procedure



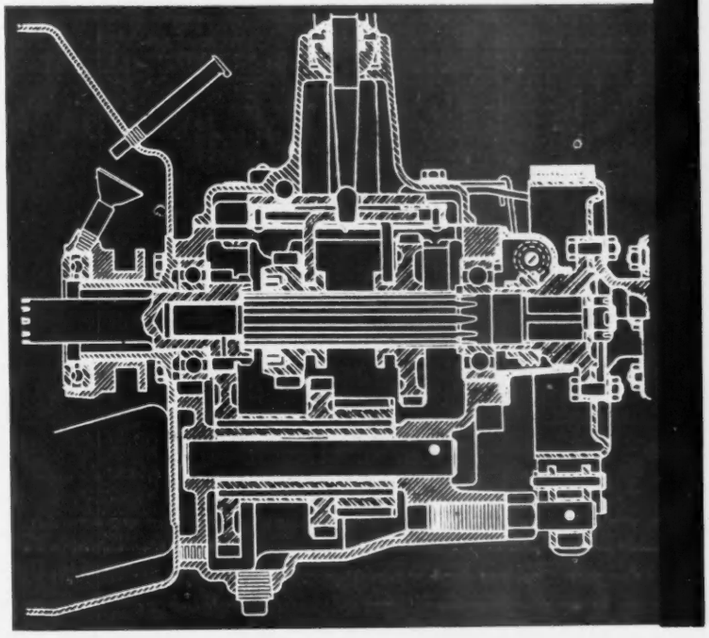
the gear except under stress, is located on the left side of the housing front cover in line with the pinion.

Non-adjustable bearings are embodied in the three-speed transmission on T-11 and four-speed unit on T-19. Interchangeable non-adjustable main bearings are used in the Pontiac engine and connecting rod bearings likewise are of the non-adjustable exchange type.

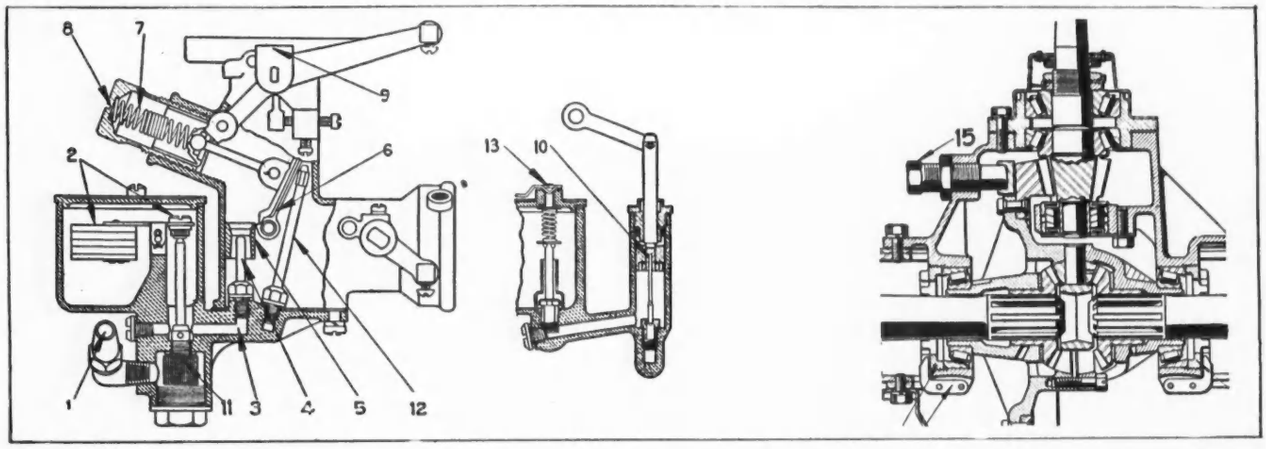
Service data concerning the previously mentioned units is given in the accompanying illustrations. The factory service department has cooperated in furnishing information and drawings.

Hook-up of Bendix Three-Shoe Brakes on Model T-19

An equalizer proportions braking effort front and rear. This equalizer has two holes in center for attachment of brake pedal rod. Top hole gives more braking on front wheels and is recommended for use with high bodies. Rod is in bottom hole when truck leaves factory. There are no equalizers, right and left. Minor adjustment of brakes: To equalize brakes loosen adjusting nut on camshaft lever of front brake or adjustable yoke on rear wheel brake rod, of tight brake. To take up first wear of lining, tighten front adjusting nuts and rear adjustable yokes one turn. Tap drum with a hammer. A clear ring indicates that shoes are not touching drum. Tighten adjustments until drum stops ringing when tapped then back off adjustment one-half turn. Make this adjustment with wheels on the ground. Major adjustment of brakes: When nut and yoke adjustments reach limits make complete readjustment of brakes. Jack up front wheels. Block brake pedal 2½ in. from released position. Loosen rear adjusting yokes and front adjusting nuts flush with ends of rods. Loosen camshaft levers and slide levers off serrations on brake camshaft. Loosen lock nut of eccentric adjustment (4). Turn wheel forward and turn eccentric by wrench in direction wheel is turning until brake begins to drag. Turn eccentric stud back just a little and lock. Turn brake camshaft up with long pliers and apply brake as hard as possible. Push lever on camshaft while in this position. Lower front wheels and jack up rear wheels. Repeat adjustment as on front except that brake camshaft is turned down with wrench handle is toward front of car, to centralize cam. To adjust new brake shoes: Loosen anchor pin nuts (3), turn camshaft with pipe wrench and apply brake hard. With brake still applied drive anchor pins toward drum by tapping on flat of nuts with hammer. Tighten nuts with 16-in. wrench. Make major adjustment, previously mentioned. Do not reline brake shoes. Replace with exchange lined shoes.



Section of four speed transmission of Model T-19. Bearings are non-adjustable



Carburetor, left, has idling jet and venturi, 4 and 5, and high speed jet 12. To adjust: turn air valve spring housing until flush with end of ratchet set spring. Then adjust for good idling, turning to right for richer mixture. Adjust one or two notches at a time until engine rolls then turn back until it runs smoothly. Change accelerating pump needle on top of float chamber to "Winter" or "Summer" setting according to temperature. Winter setting gives a richer mixture. Rear axle, right, of Model T-19. Pinion shaft end play .003 in., backlash of ring gear and pinion .005 in. Adjust pinion by shims between pinion cage and carrier. Adjusting screw 15 should be turned until it touches gear then turned out ¼ turn and locked.

Maintenance Data

for Models T-11 and T-19

Main bearing clearance	.0015 to .0025
Non-adjustable	
End clearance	.006 to .008
Connecting rod clearance	.002
Non-adjustable	
End clearance	.006 to .008
Piston	
Clearance in cylinder	.002
Pin fit in rod	.0004 to .0006
Pin fit in piston	Light press
Ring gap	.006
Ring clearance in groove	.001 to .0025
Valve	
Tappet clearance, intake	.008
exhaust	.008
Stem clearance in guide	.0005 to .0015
Camshaft	
Bearing clearance	.002
Breaker point gap	.020
Spark plug gap	.025

Oil pressure
10 to 12 lb. at 25 m.p.h. when new.
Adjust after 1,000 mi. to 20 to 25 lb. at top speed.
Regulator is on left side of crankcase opposite main bearing. Tighten screw to raise pressure.

Front end alignment	T-11	T-19
Caster angle	1½ deg.	3 deg.
Toe-in at felloe band	3/32 to 5/32	⅛ in.
Camber at felloe band	5/16 to ½	5/16 to ½ in.

Engine oil, S.A.E. viscosity, No. 40 for summer and No. 30 for winter. Spring clips, U-bolts, should be tightened after first few hundred miles of service, at 1000 and 2000 miles and at longer intervals thereafter. Do not lubricate spring leaves.

How the Diesel Engine Works

(Continued from page 20)

some form of auxiliary ignition for starting is provided.

The other method consists in injecting the fuel directly into the combustion chamber, but here too there are two alternate methods. The injection nozzle may either be closed by a valve when no fuel is being sprayed, or it may remain open. When the nozzle contains a valve, this is opened by the pressure of the fuel. The open injection nozzle is similar in appearance to a spark plug, the central wire of which is replaced by a tube.

With low speed Diesel engines the period of injection always begins at the same point of the cycle and at full load continues for about 10 per cent of the power stroke. When it is desired to reduce the power the fuel is cut off earlier, so that less is injected per stroke. In a high speed engine it is necessary not only to vary the period of injection in accordance with the power required, but also to advance and retard the point at which injection begins, the same as the spark is advanced and retarded in a carburetor engine.

As has been pointed out, one of the most difficult problems of high speed Diesel engines is to produce complete penetration of the air charge with fuel during the very brief time interval available. In a high speed engine where injection directly into the compression chamber is practiced the nozzle is generally located in the cylinder wall at the side of the compression chamber.

In recent designs it has been attempted to promote the intermixture of fuel and air by having the compression space in a pocket separated from the combustion chamber by a neck. This pocket may be either in the piston or in the cylinder head. When the piston is in the upper dead center position its top is very close to the cylinder head and practically all of the air is in the pocket. Then, as the piston moves down in the cylinder, the air flows from the pocket and in doing so meets the fuel jet which is injected into the throat. There is, therefore, a sort of counter flow, the combustion taking place within the neck at the rate at which fuel and air are brought together in it, and the products of combustion pass off into the expanding cylinder space.

Control of Diesel truck engines is very similar to that of carburetor type engines. There are generally two control levers, which correspond to the spark and throttle lever. The first lever varies the point of the cycle at which fuel injection begins and does not require any more attention than the spark lever does on the ordinary truck. The other is the cut-off lever, corresponding to the throttle, which varies the amount of fuel injected into the combustion chamber per cycle, and therefore varies the torque and the speed of the engine.

Gasoline Performance

Performance when used in a motor vehicle engine is the present basis of rating gasoline rather than gravity, color and other well-known characteristics, according to Dr. George G. Brown, professor of chemical engineering, University of Michigan. He spoke recently before the Toledo chapter of the American Chemical Society. In explaining this situation he said in part:

"As the present tendency in motor fuel production is to place emphasis upon those properties which determine superior engine performance, it seems likely that the motor fuel for the immediate future will be marketed upon the basis of performability, and that those characteristics which indicate superior motor or engine performance will be those characteristics demanded in a motor fuel.

AXLES TAKE TWO IMPACT FORCES

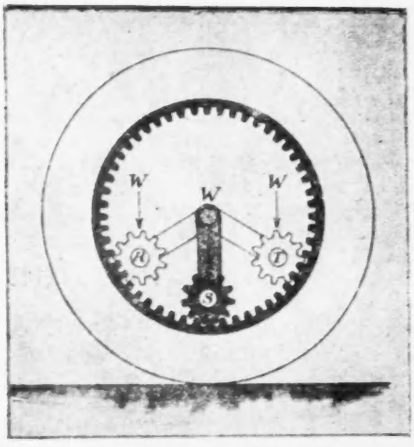
Horizontal and Vertical Stresses Are Developed When Truck Wheels Strike an Obstruction

IF all roads were perfectly smooth, truck owners and makers could afford to disregard impact forces. Because roads cannot be maintained in this ideal condition the harmful effects of impact resulting from contact of wheels with obstructions or depressions are factors of importance in truck operation.

A driver limits his speed over a bad road not by the ability of the engine to pull the truck but by the force of the jolting and bouncing. He recognizes a shock which breaks a spring as being too severe, but has difficulty in judging the harmfulness of lesser blows. Therefore designers are obliged to make provision for absorbing shocks and stresses which are larger than the static load due to weight of load, body and chassis.

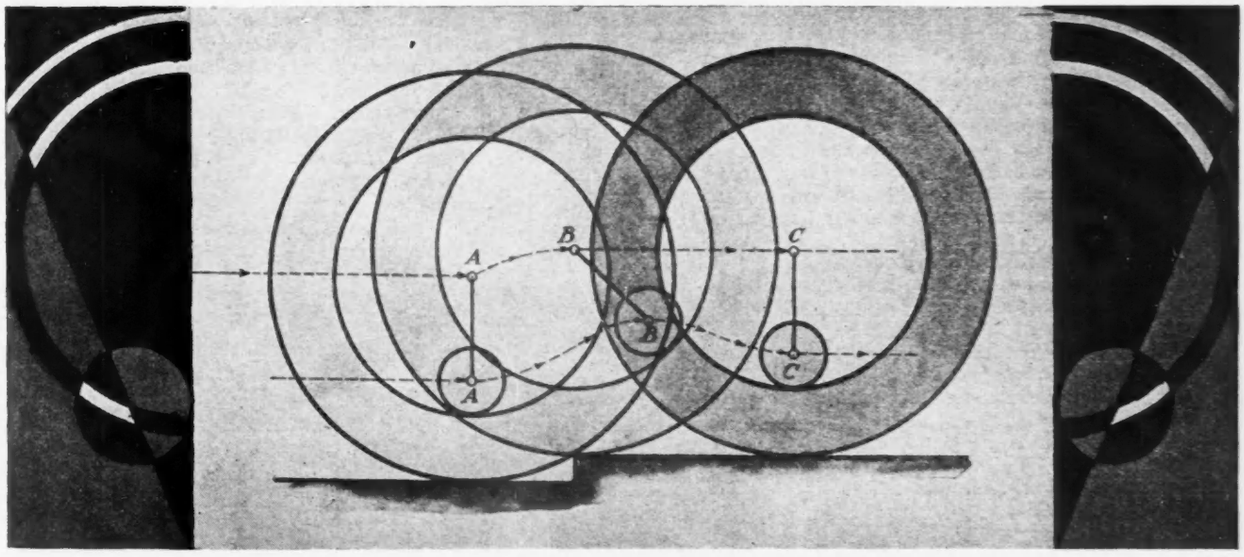
When a truck wheel strikes an obstruction on the road the impact force is in two directions, vertical and horizontal. The vertical force tends to push the axle upward and the horizontal force to move the axle to the rear. Part of this force is absorbed by cushioning effect of the tire and the balance is transmitted through the wheel to the axle and springs.

A time element is introduced into the design of practically all shock absorbing mechanisms. Instead of a rigid construction which must have sufficient bulk to withstand the force, some part is arranged to yield with the impact and so to absorb the force gradually. Tires, springs and shock absorbers are commonly used devices which incorporate this element. However, the springs, due to their position, introduce a time element for the vertical impacts only, while the uncushioned horizontal impacts are transmitted directly to the frame.



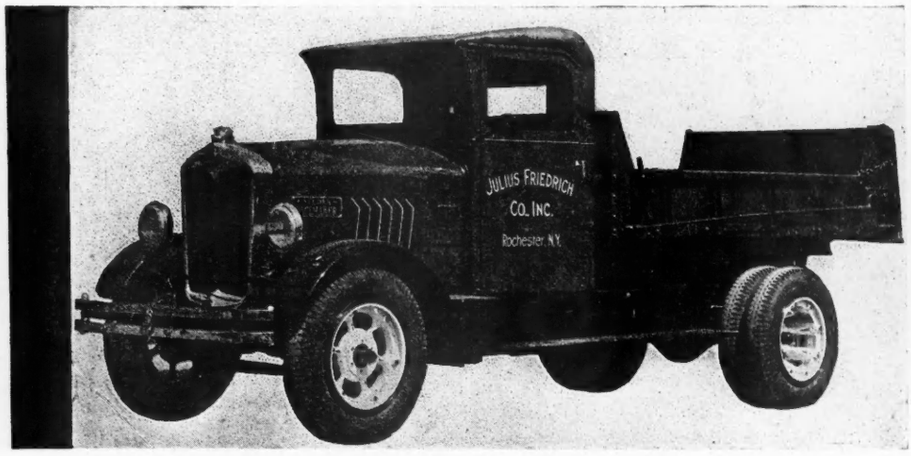
In a new application of this time element principle to truck construction the rear wheels become the yielding parts due to a pendulum type of mounting which permits some relative horizontal movement of the frame and wheels. An example of this application is the Relay axle assembly. Here power is transmitted through bevel gear reduction at the center of the axle and an internal gear drive in the rear wheels. This pendulum action also comes into action on starting. The accompanying illustrations and captions explain the manner by which the Relay axle absorbs impacts from obstructions and facilitates starting.

As the result of a series of tests conducted under the supervision of Robert W. Hunt Co., engineers, the claim is made that as compared with the standard or conventional drive, 40 per cent of the heavier vertical road shocks and 70 per cent of the heavier horizontal road shocks are absorbed by the Relay type of pendulum suspension drive.



In the Relay axle the weight of the chassis and load are supported from center of the pinion S instead of from center of wheels. The pinion may move forward to position T and backward to position R. When the rear wheels strike an obstruction they are retarded momentarily and the pinion which supports the load swings upward and forward. The truck maintains its momentum and when the pinion reaches the high point of its travel, lower B, it pulls the rear wheel forward. Path of the center of the wheel is shown at upper A, B and C and center of pinion at lower A. B. C. This yielding of the rear wheels to the force of impact resulting from hitting an obstruction relieves shock on other parts. The same action takes place when starting under load, the pinion moving forward and upward until resistance is overcome, whereupon the truck moves forward

SELDEN SIXES FOR DUMP WORK



Two-ton 138-in. wheelbase Selden dump truck

SELDEN TRUCK CORP. has announced two new valve-in-head six-cylinder dump trucks, Models 37X and 47X, 2 and 4 tons respectively. The engine of the heavier model has a 4 x 4⅛ in. engine developing 81.5 hp. at 2400 r.p.m., while the two-ton model employs a 3⅜ x 4⅝ in. engine developing 70 hp. at 2400 r.p.m. Magneto and battery ignition, air cleaner and oil filter are standard on Model 47X. Battery ignition with distributor is used on the two-tonner. Vacuum feed is employed by both.

In the 4-ton model power is transmitted through a dual range, seven-speed transmission mounted amidships to a full floating, double reduction rear axle, providing a reduction of 7.85 to 1. A unit-mounted, four-speed transmission connecting with a semi-floating, bevel gear rear, providing a reduction of 3⅜ to 1, is used in the 2-ton model. Tubular radius rods with ball and socket ends are used in both models.

Both service and hand brakes of Model 47X are internal and act on 17 x 5 in. drums. The service brakes act through B.K. vacuum booster equipment. Service brakes in the lighter model are Lockheed four-wheel hydraulic and act on 16 x 2¼ in. drums. The hand brake acts on the driveshaft. Ross cam and lever gear feature both.

Four semi-elliptic springs are used in both models with auxiliary or helper springs over the main springs. Pressed steel frames of ¼ in. stock are used in both models, but of 7-in. and 5¾-in. depth, respectively.

	Model 47X	Model 37X
Wheelbase	146 in.	138 in.
Length Body	8½ ft.	7 ft.
Tires	36x8 in.	32x6 in.

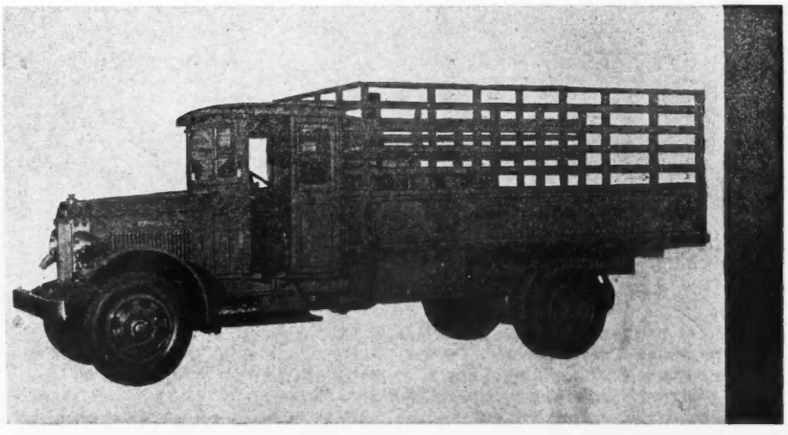
MACCAR 4-TON

Offered in Two Models With 4 or 6-Cylinder Engines, 7-Speed Transmission and Vacuum Booster System

TWO 4-ton chassis, designated as Models 84 and 86, have been added to the line of the Maccar Corp., Scranton, Pa. These new units, with the exception of the engines, are identical. As the model designations indicate one is powered by a four and the other by a six. Power is transmitted to a Timken full-floating, worm rear-axle through a seven-speed, amidships mounted, Brown-Lipe transmission. The service brakes act on the rear wheels and are mechanically operated, supplemented by a vacuum booster.

The company has also announced that its Model 46, formerly listed as a 2-ton job, is now rerated under the 2½-ton classification and is equipped with 32 x 6 in. dual pneumatic tires.

Specifications of models 84 and 86 follow: Standard wheelbase, 177 in.; maximum wheelbase, 209¼ in.; front tires, 36x6 solid; rear tires, 36x6 dual solid; engine, model 84, Buda YBUI, size, 4-4½x6 in.; engine, model 86, Buda BA-6, size 6-4⅛x5⅛; governor, Pierce; carburetor, Stromberg; fuel feed, vacuum; ignition, Robert Bosch; clutch, Brown-Lipe; rear axle, Timken 66702D; weight, 8000 lb.



New Maccar offered with a 4 or 6-cylinder engine

FLAT RATE PRICE LIST NUMBER 27

REAR AXLES

Armleder

1. Remove and replace rear axle assembly. (No repairs included) $ 3.75
2. Remove, dismantle, inspect, reassemble and reinstall rear axle assembly 15.00
3. Remove rear axle assembly, overhaul and reinstall..... 22.50
4. Remove and reinstall or renew one axle shaft ..... .50
5. Remove and reinstall differential carrier assembly, stake body truck 4.50
   A. Same operation on dump body truck 4.50
6. Disassemble, inspect and reassemble differential carrier assembly, after it has been removed from axle 6.00
7. Overhaul differential carrier assembly after it has been removed from the axle 9.00
9. Adjust worn shaft bearings.... 1.20
12. Renew wheel bearings, one wheel, full-floating type axle.... 2.25
    A. Same operation, ¾ floating type axle 3.75

Brockway

1. Remove and replace rear axle assembly. (No repairs included) $15.00
2. Remove, dismantle, inspect, reassemble and reinstall rear axle assembly 45.00
3. Remove rear axle assembly, overhaul and reinstall. Use operation No. 1 plus Timken overhaul price for Timken axles.
4. Remove and reinstall or renew one axle shaft 2.00
   A. Remove and reinstall axle shaft and wheel S, JF and JR. 6.00
5. Remove and reinstall differential carrier assembly, stake body truck 10.00
   A. Same operation on dump body truck 10.00
6. Disassemble, inspect and reassemble differential carrier assembly, after it has been removed from axle 20.00
8. Adjust ring gear and pinion JF, JR, E, EN, CJ, BF..... 2.50
   A. Adjust rear axle gears, dual reduction type rear axle 6.00
9. Adjust worm shaft bearings.... 2.50
10. Remove and reinstall pinion carrier assembly, bevel gear drive 6.00
    A. Remove and reinstall dual reduction gear drive assembly. (Does not include removal of differential and final drive gear.) 6.00
11. Renew axle housing oil retainer, one side, semi-floating axle ... 6.00
    A. Both sides 10.00
12. Renew wheel bearings, one wheel, full-floating type axle.... 4.00

Chevrolet

1928 National Series, 4-Wheel Brakes

1. Remove and replace rear axle assembly. (No repairs included)
   Commercial chassis ..... $ 3.00
   Utility truck 4.00

NOTE

Dodge Brothers delivery models include full-floating axles, semi-floating axles with torque tube drive and semi-floating axles with Hotchkiss drive. Truck axles include Graham Brothers axles in 1, 1½ and 2 ton models.

Rear axles prices will be continued in the next installment of flat rate prices and will include prices for rear axle operations on Ford Model A delivery chassis and 1½-ton truck.

3. Remove rear axle assembly, overhaul and reinstall
   Commercial chassis 11.50
   Utility truck 16.25
4. Remove and reinstall or renew one axle shaft
   Commercial chassis 1.60
   Utility truck 1.75
5. Remove and reinstall differential carrier assembly
   Commercial chassis 4.00
   Utility truck 5.25
7. Overhaul differential carrier assembly after it has been removed from the axle
   Commercial chassis 5.00
   Utility truck 6.00
8. Adjust ring gear and pinion, includes adjusting pinion shaft and differential bearings, adjusting position of gears and test run if necessary
   Commercial chassis 5.50
   Utility truck 6.00
11. Renew axle housing oil retainer, one side
    Commercial chassis 1.80
    Utility truck 1.80
13. Tighten rear wheels on axle shafts
    All models ..... .60

Dodge Brothers

1. Remove and replace rear axle assembly. (No repairs included.) Does not include removal and replacement of wheels
   Delivery models ..... $ 2.85
   Truck models 4.75
3. Remove rear axle assembly, overhaul and reinstall
   Full floating axle 14.00
   Semi-floating, torque tube... 15.25
   Semi-floating, Hotchkiss drive 12.25
   Graham Brothers 19.25
4. Remove and reinstall or renew one axle shaft
   Full floating axle 1.10
   Semi-floating axle 1.10
   Graham Brothers 2.75
   A. When necessary to remove differential assembly. Full floating and semi-floating axles.... 7.00
5. Remove and reinstall differential carrier assembly
   Delivery models 8.50
   Truck models 10.75
8. Adjust ring gear and pinion and bearing
   Full floating 6.15
   Semi-floating, torque tube.... 9.75
   Semi-floating, Hotchkiss drive 8.00
   A. Adjust ring gear and pinion gears only. All models..... 4.75
10. Remove and reinstall pinion carrier assembly, bevel gear drive
    Full floating 7.25
    Semi-floating, torque tube ... 8.50
    Semi-floating, Hotchkiss drive 5.50
    Graham Brothers 9.50
11. Renew axle housing oil retainer, one side
    Full floating 1.90
    Semi-floating 2.75
    A. Both sides
    Full floating 3.00
12. Renew wheel bearings, one wheel, full floating type axle... 1.25
    A. Renew outer bearing semi-floating type axle 2.00

Ford Model T

1. Remove and replace rear axle assembly. (No repairs included)
   Delivery chassis ..... $ 2.70
   Truck 5.00
2. Renew axle housing
   Delivery chassis 6.25
3. Remove rear axle assembly, overhaul and reinstall
   Delivery chassis 7.00
   Truck 12.25
4. Remove and reinstall or renew one axle shaft
   Delivery chassis 5.00
   Truck 8.00
5. Remove and reinstall differential carrier assembly
   Delivery chassis 4.25
6. Renew or repair driveshaft tube
   Truck 7.00
7. Overhaul differential assembly and shafts after removal from axle
   Delivery chassis 1.50
   A. Overhaul differential and housing assembly after removal from truck
   Truck 4.00
8. Overhaul torque tube assembly after removal from axle 2.50
11. Renew axle housing felt, one side
    Delivery chassis ..... .75
    Truck chassis 1.25
    A. Both sides
    Delivery chassis 1.25
    Truck 2.25
    B. Install or renew leather oil retainers, one side
    Delivery chassis 1.25
    Both sides 2.50
13. Renew outer roller bearing
    Delivery chassis 1.25
    Truck 1.50
14. Replace spring perch, one side
    Delivery chassis ..... .75
    Truck 1.50
    A. Both sides
    Delivery chassis 1.25
    Truck 2.00

ENGINE REPAIR STANDARDS

Clearances and Adjustments Recommended by Factories

Additional tables of figures showing standards for engine maintenance will be given, as the information becomes available.

ENGINE	LYCOMING			
	C Series	S Series	T Series	WG Series
MAIN BEARINGS No.	5	4	4	4
Diametral clearance	.002	.002	.003	.002
Wear before adjustment	.004	.004	.004	.004
Total shim thickness	None	None	None	None
Number and size of shims	None	None	None	None
Bearing controls end play of crankshaft	Center	1st Int.	1st Int.	2nd Int.
End clearance this bearing	.004–.008	.004–.008	.004–.008	.004–.008
End clearance other bearings	1/16	1/16	1/16	1/16
CONNECTING ROD BEARING				
Diametral clearance	.0015	.0015	.00225	.0015
Wear before adjustment	.004	.004	.004	.004
Total shim thickness	None	None	None	None
Number and size shims	None	5–.002	None	None
Bearing shell	Separate	Integral	Integral	Integral
PISTON				
Material	Iron (a)	Iron (a)	Iron (a)	Iron (a)
Pin locks in	Rod	Piston	Piston	Rod
Oversizes (pin) (.000)	3, 5, 10	3, 5, 10	3, 5, 10	3, 5, 10
Clearance in cylinder (thousandths)	3½	3	3½	3
VALVE GUIDES				
Size to ream intake	.3765	.3445	.3765	.3445
Size to ream exhaust	.3765	.3445	.3765	.3445
TIMING GEAR				
Back lash	.002–.004	.002–.004	.002–.004	.002–.004
How adjusted	Gear size	Gear size	Gear size	Gear size
CAMSHAFT				
Size to ream bearings front	2.039	2.039	2.039	2.039
second	2.008	2.008	2.008	2.008
third	1.976	1.992	1.992	1.992
fourth	1.945	1.976	1.960	1.976
fifth	.....	1.960	1.945	1.945
End play control	Thrust plunger	Thrust plunger	Thrust plunger	Thrust plunger
End play allowed	.031	.031	.031	.031
OIL PRESSURE				
Minimum @ speed (r.p.m.)	15	15	15	15
Maximum @ speed (r.p.m.)	50	50	50	50
Adjustment location	Fixed	Fixed	Fixed	Fixed

(a) Alloy optional.

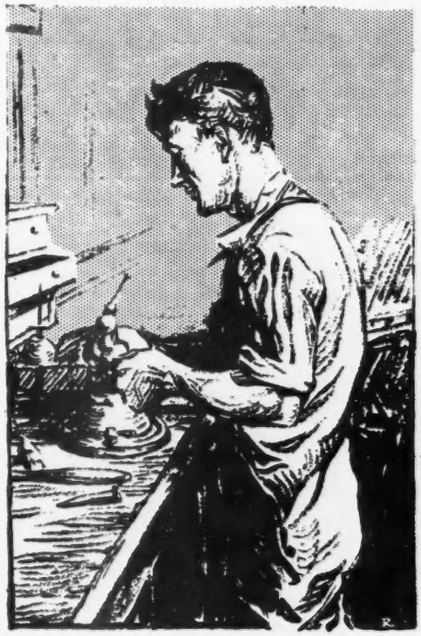
SERVICE HINTS

From Shop and Factory

Lapping Knuckle Pins

Final fitting of steering knuckle and tie-rod pins by the lapping process gives a better fit, according to F. Alward, Alward & Washburn, Inc., Paterson, N. J. He finds that the job can be done quickly by using an electric drill.

A piece of steel rod, or a bolt with the head cut off, is threaded to fit the hole for the high-pressure lubrication fitting in the head of the pin. This is put in place and then driven by the chuck of the drill, as shown in the illustration.



Electric drill lapping steering knuckle pins

Cleaning Small Taps

A handy cleaner for small taps can be made easily from an empty tobacco can and twine. The cover is bent back and wound firmly with twine, as shown. Press and rub the tap threads over the cords and the fine dirt and grease will be pushed out into the flutes. Frank W. Bentley, Jr., Missouri Valley, Iowa.

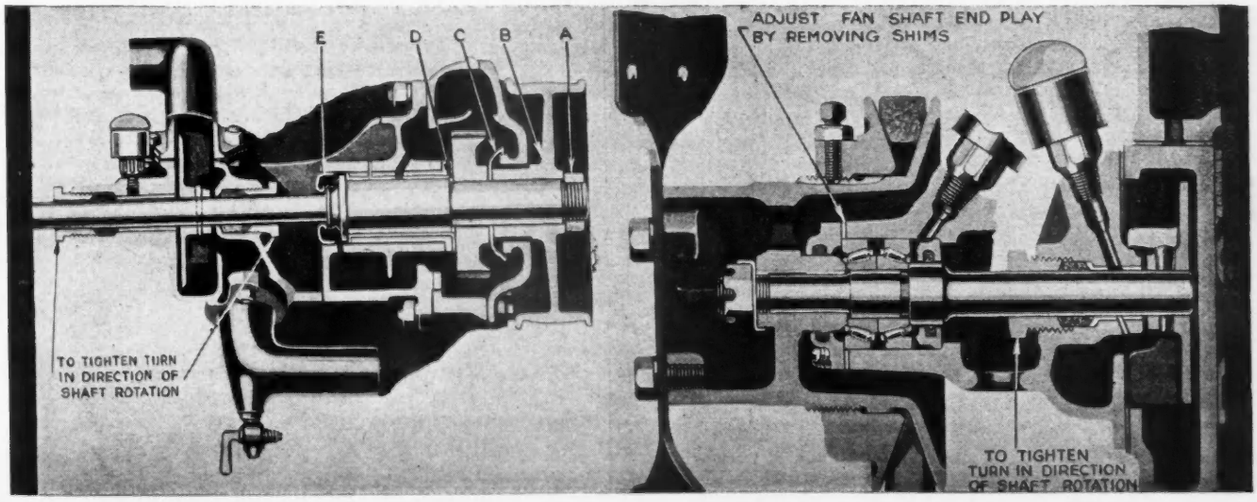
Cleaning a tap on strands of twine

Handy Governor Manual

A manual dealing broadly with matter of governor control is being distributed by the Handy Governor Corp., Detroit. It is elaborately illustrated and besides containing an explanation of the company's product provides complete instructions for installation and service. It also gives a complete listing of all current truck models together with necessary installation information.

Water Pumps

Means of adjustment of end play of water pump shafts is provided on Continental engines with water pump on the side at the front and in the water jacket at the front. The former type is shown in Fig. 1, and the latter in Fig. 2. Continental Motors service department recommendation for adjustment of end play is given in the accompanying illustrations.



Below: Left, Water pump mounted at side of engine. Make sure that nut A is tight against pulley B which will force oil thrower C and gear against shim pack D. Take up end play by removing shims from pack D. Right, Water jacket type pump. End play is adjusted by shims under bearing cap

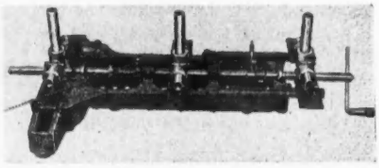
NEW PRODUCTS FOR THE TRUCK MARKET

Chassis Magazine Oiler

A new type ball-check valve cap is now being used in Myers chassis oilers in place of the former plain plug. The oilers can be filled, without removing the cap, by means of a hand oil gun supplied by the makers. It can also be filled by nozzle on a compressed air system. Made by Myers Chassis Lubricating Co., Rahway, N. J.

Brake Lining Stretcher

This device, made by the Fostoria Screw Co., Fostoria, Ohio, is designed to stretch brake lining tightly on any type of internal band or shoe without slipping to simplify drilling and countersinking. The studded head grips the entire width of the band and tension is applied by tightening the nuts on each bolt against the bar at end of the shoe. It is made in two sizes, 3 and 6 in. Price, $3.50.



Line Boring Machine

Model No. 1 Main and Camshaft Bearing Machine, made by the Simplicity Mfg. Co., Port Washington, Wis., is adaptable to any size of engine, being furnished with three boring bar supports and parallel bars to permit end supporting brackets to extend beyond the ends of big engine blocks. Horizontal cross-arms and vertical bars in the support bracket are turned or slid for aligning regardless of irregularities of crankcase.

Weighing Jack

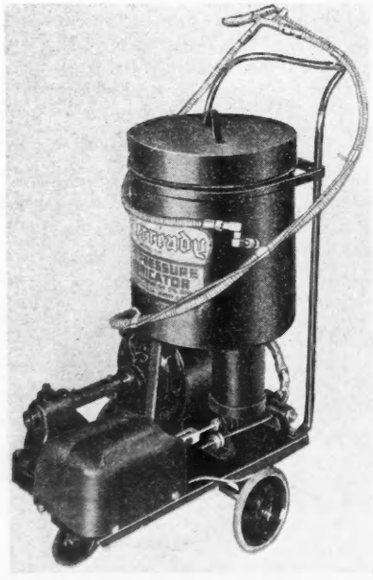
While designed to test loads of various kinds, this jack made by the Blackhawk Mfg. Co., Milwaukee, is particularly useful for determining weights of loaded trucks or weight on any wheel. The gages are individually calibrated to conform to the Bureau of Standards specifications for hydraulic gages. They are obtainable in any tonnage.

Electromatic Lubricator

A portable power driven high pressure lubricator. A ½ hp. motor operates the pump plunger through a link providing a slow power stroke and a quick return. Lubricant is fed to the pump from a tank holding 75 lb. and flow of lubricant is controlled from nozzle by flexible wire. Made by Rogers Products Co., Inc., Jersey City, N. J.

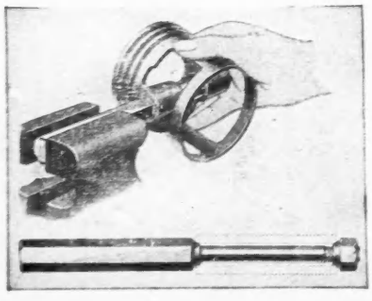
Electric Lubricator

This lubricator, made by the Dot Lubricating Division, Carr Fastener Co., Cambridge, Mass., with its electrically operated air pump, develops from 2200 to 3000 lb. pressure at the fitting. Delivery is at the rate of 11 oz. per minute. The tank has a grease capacity of 21 lb. and may be filled through the top by hand or through the base by a barrel pump. Price, $195 complete.



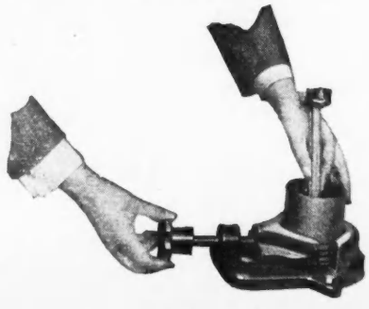
Pin Hole Burnisher

This new tool K-268 offered by the Kent-Moore Organization, Detroit, Mich., is for use in burnishing piston pin holes. In practice the tool is clamped in a vise, pin slid on and tapered nut turned up tight. The piston or rod is then forced over pin and turned back and forth.



Piston Vise

The K-45 piston vise offered by the Kent-Moore Organization, Detroit, Mich., simplifies the removal of piston rings and fitting new rings and piston pins. The vise is bolted to the top of the bench and is furnished with babbitt jaws. Weight complete, 15 lb.



Handling Ease is Vital in Trucks and Buses

BECAUSE of the greater weight and heavy loads to be controlled, ease of handling is even more vital in trucks and buses than in passenger cars. The majority of truck and bus manufacturers recognize this fact and use Ross Cam and Lever Steering Gears as standard equipment.

A bus or truck that has Ross Steering can, by reason of its quick, easy maneuverability, make better time through city traffic and out on the roads. Extreme slowing down over rough roads and streets is unnecessary with Ross. Corners and curves can be taken at smarter speeds—safely. Driver confidence is increased and the possibility of minor accidents is notably decreased.

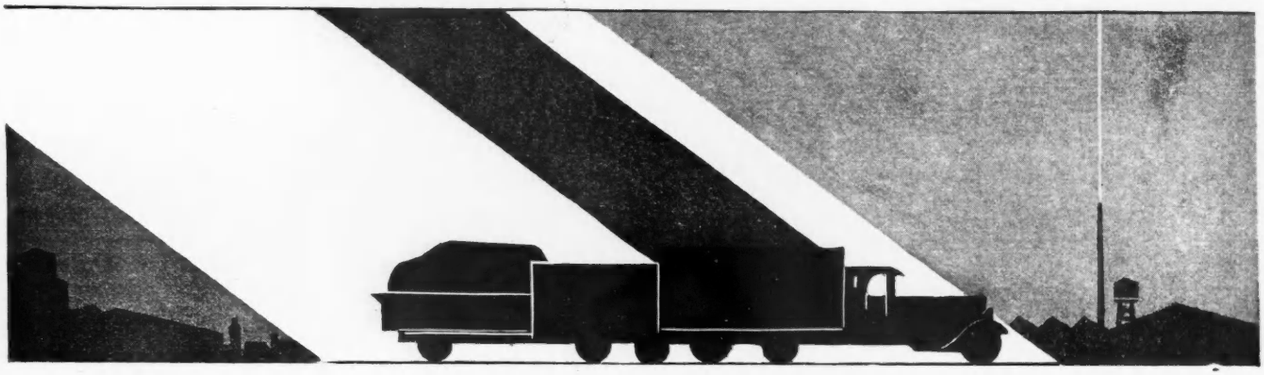
Ross controls road-shock to an extent that permits driving over the roughest roads without jiggle or jerk in the wheel. It holds the front wheels true in their course through heavy sand and gravel. It permits the greatest ease of wheel-turn yet retains the essential quality of road-sense which gives the driver the "feel" of the road.

Write for complete information
on Ross Cam and Lever Steering Gears

ROSS GEAR & TOOL CO. · LAFAYETTE, INDIANA

ROSS *Cam* AND *Lever* STEERING

TRUCK INDUSTRY



N-E-W-S

Diesel Powered Motor Trucks in Five Years

Diesel engines will be in common use in passenger cars as well as trucks within five years, according to prediction made by Capt. Edward Rickenbacker, president of the Indianapolis Speedway Association.

Rules of the Speedway race in 1930 are favorable to use of designs differing from those now in common use, such as Diesels, either two or four-cycle, and two-cycles with displacement pump cylinder charging. Capt. Rickenbacker stated further that the rules were purposely made broad in scope in order to encourage development of engine design.

Heavy Truck Exports

Truck exports have increased twelvefold within the last six years, rising in value from $8,270,708 for 11,443 units in 1922 to $91,321,468 for 138,782 units in 1928, according to a report by the United States Department of Commerce. Nearly 26 per cent of the total truck output of the United States found its way into foreign markets during 1928.

Show Committee

In preparation for the national commercial vehicle show recently authorized by the National Automobile Chamber of Commerce, which will be held in the Middle West, probably late in the year, the following men were requested to serve as an advisory committee: P. W. Seiler, General Motors Truck Corp.; M. L. Pulcher, Federal Motors Truck Co.; W. C. White, White Motor Co.; H. E. Sneathen, Dodge Brothers, Inc., and W. S. McAfee, International Harvester Co.

Shatter Output Records

Truck production in January totaled 51,537. This record, which shatters all previous highs for January, compares with 26,083 in 1928; 39,258 in 1927; 30,003 in 1926, and 28,814 in 1925. Combined passenger car and truck production estimated for February is 475,000 and for the first quarter, 1,350,000.

Record Year for Parts Makers

Parts makers in 1928 enjoyed their greatest year and look forward to even more business in 1929, according to W. R. Angell, executive vice-president, Continental Motors. There was a gain in 1928 of 15 per cent over 1927 in the production of engines, bodies, parts and accessories supplied to car and truck manufacturers for original equipment.

The Diamond T truck that Will J. Cameron used to conquer the Kalahara Desert and the African wilderness. Streams had to be forded, forests of reeds overcome and soft desert sands traversed

Bump Succeeds Marshall as Larrabee Head

F. R. Bump has been elected president of the Larrabee-Deyo Truck Co., Binghamton, N. Y., succeeding S. J. Marshall. The latter accepted the presidency a year ago to aid in reorganizing the company and placing it on a profitable basis. Mr. Bump served as vice-president and general manager during the last year. Harry Richards succeeds Mr. Bump as vice-president. The company manufactured more than 500 trucks last year, and officers expect to double this number during 1929.

Trailer Holding Company

The Trailer Co. of America was recently formed as holding company of the Trailmobile Co. of Cincinnati and the Lapeer Trailer Corp. of Lapeer, Mich., to strengthen the resources of these companies. Both companies will continue to operate as separate manufacturing and selling organizations. Officers of the holding company are J. Englander, president; S. B. Winn, vice-president, A. J. Woltering, secretary and treasurer.

Gemmer for Fords

Gemmer Mfg. Co. has started delivery of steering gears on its contract with the Ford Motor Car Co., according to Edward P. Hammond, president of Gemmer. The company expects to make 600,000 gears in the first half of the year.

Commercial Car Specifications on Page 65

The 1929 Stewarts

1 Ton
6 cylinder
4 wheel Brakes
$995
Chassis

— embody improvements that place them far ahead of the field

THE new and better Stewarts are being hailed as the outstanding truck value of the age by men who know the industry from A to Z. For 16 years Stewarts have built up a reputation as quality trucks, moderately priced. Today Stewarts have all the latest known, worthwhile mechanical improvements, plus the time tested and proven Stewart features that have earned the motto, "Stewart Trucks have won — By costing less to run."

Built to Last 5 Years or More

Stewart owners do not figure depreciation on a 2 or 3 year basis. They know by experience that the average life of a Stewart is 5 years or more. Many Stewarts have given their owners. 8, 10 and 12 years of service.

Measured in miles and years of service, Stewarts cost less to buy and operate. Continuous service year in and year out has given Stewart a world-wide reputation as "America's Greatest Truck value."

Stewart Sales are Increasing

1926 sales 41% ahead of 1925 . . 1927, 45.7% over 1926 and in 1928 an increase of 53% over 1927. That's the story of Stewart success in figures. Write or wire for details of Stewart's liberal franchise.

STEWART MOTOR CORPORATION
BUFFALO, N. Y.

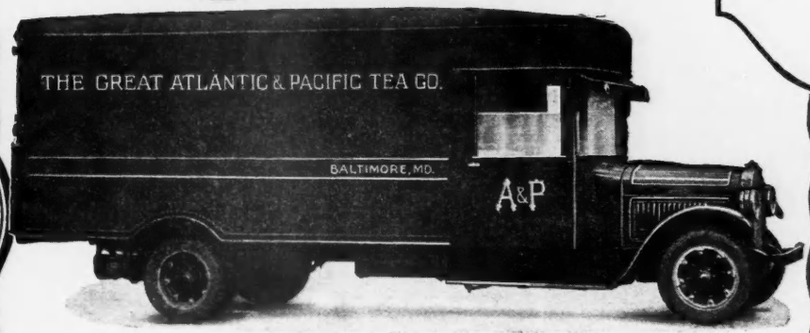
Export Branch: 1 BROADWAY (Dept. 3) NEW YORK CITY
Cable Address, Stewartruk New York, Codes Bentley and Acme

Models

¾ Ton
6 Cylinder . . . $895 Chassis
1 Ton
6 Cylinder . . . $995 Chassis
1¼ Ton
4 or 6 Cylinder . $1295 Chassis
1½ Ton
4 or 6 Cylinder . $1645 Chassis
2 Ton
4 or 6 Cylinder . $1975 Chassis
Worm Axle . . $2095 Chassis
2½ Ton
6 Cylinder . . . $2690 Chassis
3 Ton
6 Cylinder . . $3490 Chassis
4 Ton
6 Cylinder . . . $4200 Chassis

All prices f.o.b. Buffalo

Stewart
MOTOR TRUCKS



3 Ton
6 cylinder
4 wheel Brakes
$3490
Chassis

Stewart Trucks Have Won By Costing Less to Run

Sterling Truck Refinances to Increase Capital

Sterling Motor Truck Co. recently issued new shares of stock to retire mortgage and land contract obligations and to increase working capital. The new financial set-up is 60,000 shares of preferred, valued at $1,800,000, and 120,000 shares of no par common stock. Sterling assets are listed at $4,320,000. Net profits of 1928 totaled $325,547; production, 1374 trucks; gross sales, $7,128,000.

Manley Buys Two Plants

Manley Mfg. Co., Bridgeport, Conn., has purchased the Utica Air Compressor and Lowville Vise divisions of Lowville Machine & Vise Co., Inc., Lowville, N. Y. The compressor will be sold under the name of Manley-Utica, and the vises will be added to the regular Manley line.

Fuel Oil for Diesels

Progress has been made in the standardization of specifications for Diesel engine fuel oil by a special research committee working under the auspices of the American Society of Mechanical Engineers. The committee has satisfied itself that grading of oil requires consideration of viscosity, sulphur content and moisture.

Thompson Products Enlarges

Thompson Products, Inc., with the approval of the stockholders, has purchased the Cleveland Piston & Mfg. Co. and the Cox Tool Company of Cleveland. The company has also appropriated $725,000 for the erection of new units in Detroit and Cleveland.

Ohmer Has Record Month

Ohmer Fare Register Co., manufacturer of the Recordograf, Odometer and Hubodometer, reports that the month of January was the best month in point of sales in the history of the company. The plant is working day and night to take care of unfilled orders.

FWD Sales Increased 24.3 Per Cent

FWD truck sales for the year 1928 showed an increase of 24.3 per cent over sales of 1927, according to an announcement by the Four Wheel Drive Auto Co. This increase in sales was made over the increase of 45.5 per cent and 57.2 per cent for the past two years.

Larrabee Adopts Straight Rating

Larrabee-Deyo Motor Truck Co., Inc., Binghamton, N. Y., is now rating its trucks by total vehicle gross weight, rather than by load capacity. The new rating figure includes weight of truck, complete with body and load.

Tests Highway Guard Rails

A highway guard rail which will withstand the impact of a 5-ton truck at 20 m.p.h. has been developed by the State Highway Department of Pennsylvania. The design resulted from experiments in which a truck with total gross weight of 10,000 lb. was allowed to run down an inclined plank runway and strike a guard rail at the edge of an embankment. The tests indicated points of weakness in guard rail construction, and these were improved progressively until the final design was achieved.

Leroy, Goodyear Treasurer

P. E. H. Leroy, formerly assistant treasurer, Goodyear Tire & Rubber Co., has succeeded P. H. Hart as treasurer of the company. Mr. Leroy came to Goodyear in 1920, joining the company as an expert in foreign exchange. His early business experience included 10 years with Kedder Peabody Co. of New York.

Propose Cooperative Terminal

Application has been made to the Pennsylvania Public Service Commission by the Philadelphia Drayage & Express Corp. for certificate of convenience and necessity for operation in Philadelphia and surrounding territory. The corporation is organized, controlled and directed by 11 existing carriers, all except two of which are common carriers, to provide facilities for greater coordination of transportation by means of cooperative truck terminal service.

Willoughby, Pierce Manager

D. J. Willoughby has been appointed general manager of the Pierce-Arrow Motor Car Co., according to George E. Willis, vice-president in charge of sales.

Take Over American Express

Railway Express Agency, Inc., which was organized by 87 railroads, took over the property and business of the American Railway Express Co., Feb. 28. There will be no change in operation and personnel, the sole change being in name and ownership.

Coming Events

SHOWS

Albany, N. Y.—State Armory....Mar. 19-26
Chicago—Motor & Equipment Assn. Nov. 4-9
Detroit—National Standard Parts Assn. .....Nov. 11-16
Quebec, Can.—Drill House.....Mar. 16-23

CONVENTIONS

Chicago—Hotel Stevens—National Highway Traffic Assn.....May 13-15
Detroit—National Standard Parts Assn. .....Nov. 11-16
Saranac Lake—S.A.E. Summer Meeting .....June 25-28

General Motors Truck Line Offered in 42 Types

In connection with its adoption of gross weight rating for all truck models General Motors Truck Corp. is offering several different types of each model, except the light delivery Model T-11, which has only one type and the heavy-duty model K-102, which has two types. The types include options in wheelbases, tires and maximum total gross weights. The following prices cover the shortest wheelbase of each model and those types differing in maximum allowable gross weight:

Model	Type	Gross Weight	Price
T-11	1,001	3,800	$625
T-19	2,001	8,000	1,015
	2,003	6,000	895
T-30	3,001	10,000	1,530
	3,003	8,000	1,395
T-42	4,001	12,000	1,885
	4,003	10,000	1,685
T-60	5,001	16,000	3,215
	5,002	18,000	3,160
	5,003	14,500	2,800
K-102	6,001	28,000	4,250

Options in wheelbase and/or tire equipment are provided in 31 more types in addition to those listed. The price of each type varies according to these options. The entire General Motors line, with the exception of Model K-102, is furnished with pneumatic equipment. Model T-80 is discontinued.

Allen With Chassis Lubricating

Gould Allen, who is well-known in the automotive parts industry, has purchased a large interest in the Chassis Lubricating Co. of Rahway, N. J., and has been appointed sales manager of the company. Mr. Allen formerly represented the Brown-Lipe Gear Co. in the Detroit and adjoining territory for 12 years. The Chassis Lubricating Co. markets the Myers Magazine Oiling System.

Warner Triples Space

The Warner Manufacturing Co., maker of trailer and electric brakes, has tripled its manufacturing facilities by securing space from the Electric Wheel Co., Quincy, Ill. Production of trailers has been shifted to the Quincy plant, while production of electric brakes will be continued at the plant in Beloit, Wis.

Wettig With Studebaker

Carl Wettig has been appointed manager of Studebaker's Philadelphia branch, succeeding H. S. Johnson, who has been transferred to the export sales department of Studebaker in South Bend.

Lierman Directs Advertising

Arthur D. Lierman has been placed in charge of advertising for Mack Trucks, Inc., and also the sales magazine, Mack Bulldog, with headquarters at Anable Ave. and Thirty-fourth St., Long Island City, N. Y.

B & D Doubles Net Profit

Black & Decker Mfg. Co. reports net profit for 1928 as $523,787, after all charges and taxes. This compares with $257,000 in 1927.

Commercial Car Specifications on Page 65

WHAT'S YOUR HURRY—

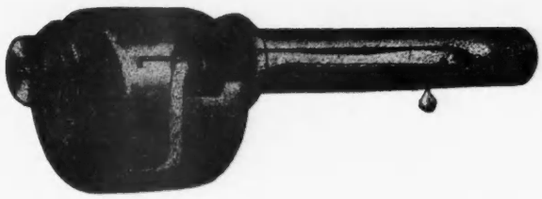
A PAGE of Straight-from-the-Shoulder Facts about Chassis Lubrication. Published for Hard Boiled Fleet Operators who know that High-Pressure Salesmanship never kept a dry Bearing from wearing out.

Let's Use Common Sense

If present-day "high pressure" grease lubrication is a real advance beyond the old-fashioned grease cup, why do Chassis Bearings wear out with the same old regularity?

The bearings and bushings are all made better, and from better materials than they were ten years ago. Why don't they last longer?

The answer is found in two words—PARTIAL LUBRICATION. Chassis bearings wear out today for the same reason that they wore out when grease cups were used. Because they *aren't really getting* lubrication.



Users Know!

Truck and bus *users* see things from a very practical angle. The user wants his purchase to be the *best* his money can buy.

This attitude of the user's is not a matter of pride. It is a matter of good business. It is a matter of cutting idle time and slicing repair expense. Therefore, it should be mighty interesting to you to know that *every* USER of Myers Magazine Oiling System has SPECIFIED Myers Protection as standard equipment when buying new trucks or buses.

Repair Bills Tell the Truth

This very month more fleet operators are installing Myers Magazine Oiling System at their own expense. They are ripping off the grease fittings and putting on Myers oilers. They aren't doing it for fun and they aren't doing it on "hunch." They are cashing-in on FACTS they dug up for themselves during long, exacting TESTS (one to three *years*).

They discovered that a Shacklebolt, or Kingpin, or Clutch, Release—or any other Chassis Bearing—lasts at least twice as long when lubricated by the Myers System. No one *talked* them into this conclusion. They found out by watching their repair bills.

CLOCK-LIKE!

Every second, no matter whether the vehicle is motionless or running at top speed, every Chassis Bearing fitted with a Myers Magazine Oiler is *covered* with a film of *filtered* oil. It can't stop or clog. As a drop of oil works off the bearing a new drop crawls up the wick and enters the bearing. One filling is good for 1500 to 3000 miles, depending on the fit of the bearing.

Specify—it pays!

Before buying another truck or bus, ask us for technical data and field history. Ask for the *names* of Fleet Superintendents who thought our claims were silly—until they had *tested* Myers equipment on "bad actor" vehicles. We will tell you how many months—or *years*—they tested. We will show you their *repeat orders* for hundreds of complete installations. And we will ask you to remember that, in every case, they *junked* the lubrication system with which the chassis had originally been equipped. And they paid the cost of Myers equipment because they KNEW they'd save more than they spent.

Today users of over 50,000 Reo, Fageol, Lange and Ward La France trucks and buses are ardent advocates of the Myers System. It works constantly and automatically to keep these vehicles out of the shop.

CHASSIS LUBRICATING COMPANY, Inc.

Rahway, N. J.
(Home Office)

Detroit, Mich.
(Gould Allen)

JOINT TERMINALS

(Continued from page 31)

needed. Chambers of commerce and other business organizations were especially active in promoting these clearing houses for motor truck facilities.

After the passing of the war emergencies and the raising of the restrictions upon railroad transportation, the motor truck continued to operate between cities and towns in direct competition to the freight facilities of the railroads, express companies, electric railways and steamship lines. The competition was especially keen for short haul freight traffic. Return-load bureaus were discontinued and motor trucking passed through a period of unorganized competition of rival operators without coordination or direction. No large operators dominated the field and few independent operators participated in through service or rate arrangements with other operators to extend their fields of service or to establish stability or order in rate-making. Unwise competition led to abuses and disorganization which offset, in some cases, a few of the advantages of motor transportation.

Three outstanding defects of motor transportation are attributable to these causes. In the first place, the schedules of service of certain independent motor freight carriers are sometimes irregular and undependable. Scheduled trips are sometimes missed, calls or deliveries are made later than promised, service is sometimes discontinued or seriously delayed in inclement weather and in some cases the operations have been temporarily or permanently abandoned without notice to patrons.

In the second place, the inability or unwillingness of certain motor carriers to assume full responsibility and liability for loss, damage or delay suffered to goods in their possession has made it difficult for shippers to use the services confidently. Unexpected and severe losses due to the loss of or damage to freight against which the operators had no insurance have caused some carriers to become bankrupt and shippers to suffer losses which have unfortunately prejudiced them against motor freight services in general.

In the third place, many motor freight carriers have published no tariffs of charges or have failed to adhere to these schedules of charges in dealing with all shippers. Variations in rates have caused confusion and sometimes have resulted in unjust discrimination among shippers, places and kinds of freight.

It is a sweeping statement to make but it can confidently be said that motor truck freight transportation can never aspire to hold place as a major common carrier transportation utility until the carriers in the field maintain regular service schedules, assume full uniform liability for loss and damage of cargo, and publish and adhere to definite schedules of rates and charges.

In order to overcome the disadvantages under which independent motor freight operators often labor, groups of carriers of freight over the highways have centralized their operations, improved their standards and united for their mutual benefit by joining into associations operating through common terminals located in strategic positions in the centers of the areas served by the carriers. These cooperative central truck terminals, if properly located, organized, financed and managed permit the integration of the services of motor freight carriers with each other, and promote the coordination of motor freight transportation with the freight services offered by other carriers and warehouse companies. They are of great practical value to the operators using them and to shippers and consignees using the services of the carriers. The advantages are summed up elsewhere on these pages.

After an understanding has been reached among the operators serving a district that a cooperative central motor truck freight terminal should be established at the point where their services converge, it next becomes necessary for them to organize, to define their objectives and to select a site for the proposed terminal.

Tom Snyder, president of the Central Union Truck Terminal of Indianapolis, the results of whose experience and of his organization are of interest and value to those who wish to extend the field of usefulness and improve the successful operation of motor freight services, has some ideas along this line that should prove helpful. Mr. Snyder believes that a few aggressive and responsible motor truck operators can join in establishing a central truck operation with a relatively small amount of capital, if the determination to cooperate and succeed is present in abundance. It is the old but ever true story of character rather than cash as the *sine qua non*. The size of the city or town is not subject to exact definition, Mr. Snyder believes, for it is the strategic location of the community and the trade territory it serves that is the determining factor. There must be a reasonable amount of freight which is susceptible to movement by motor truck, and there must be a definite territory to be served either producing or consuming freight, preferably both, which can be carried by motor trucks. Definite contractual relationships should be established by written contracts and enforced as to all parties to the agreement, if the undertaking is to be successful. Uniform policies with respect to routes, schedules, liability, pick-up, delivery and interchange of the goods should be established and enforced equitably among all patrons. Definite, fair and profit-producing rates must be observed by all carriers for all users of the services.

The terminal should be located in or near the wholesale business district, near the places of business of shippers and consignees, close to the freight stations of the steam railroads or electric railways or close to steamship piers, and adjacent to warehouses. The terminal should have a track connection with a steam railroad or electric railway or both in order to develop the vastly important business of distributing and concentrating freight and to coordinate the railroad, electric railway or steamship facilities with those of the motor freight carriers and to connect the motor and warehousing business. The terminal should be located in a district where the roadways are wide and well paved and free from congestion and near the roads or streets leading out to the routes served by the territories. Proper warehouse and platform facilities should be provided, and adequate office space must be available for the work of the central terminal managers as well as for the work of the line operators.

(The next article in the series will discuss the relation between the terminal company and the operator.)

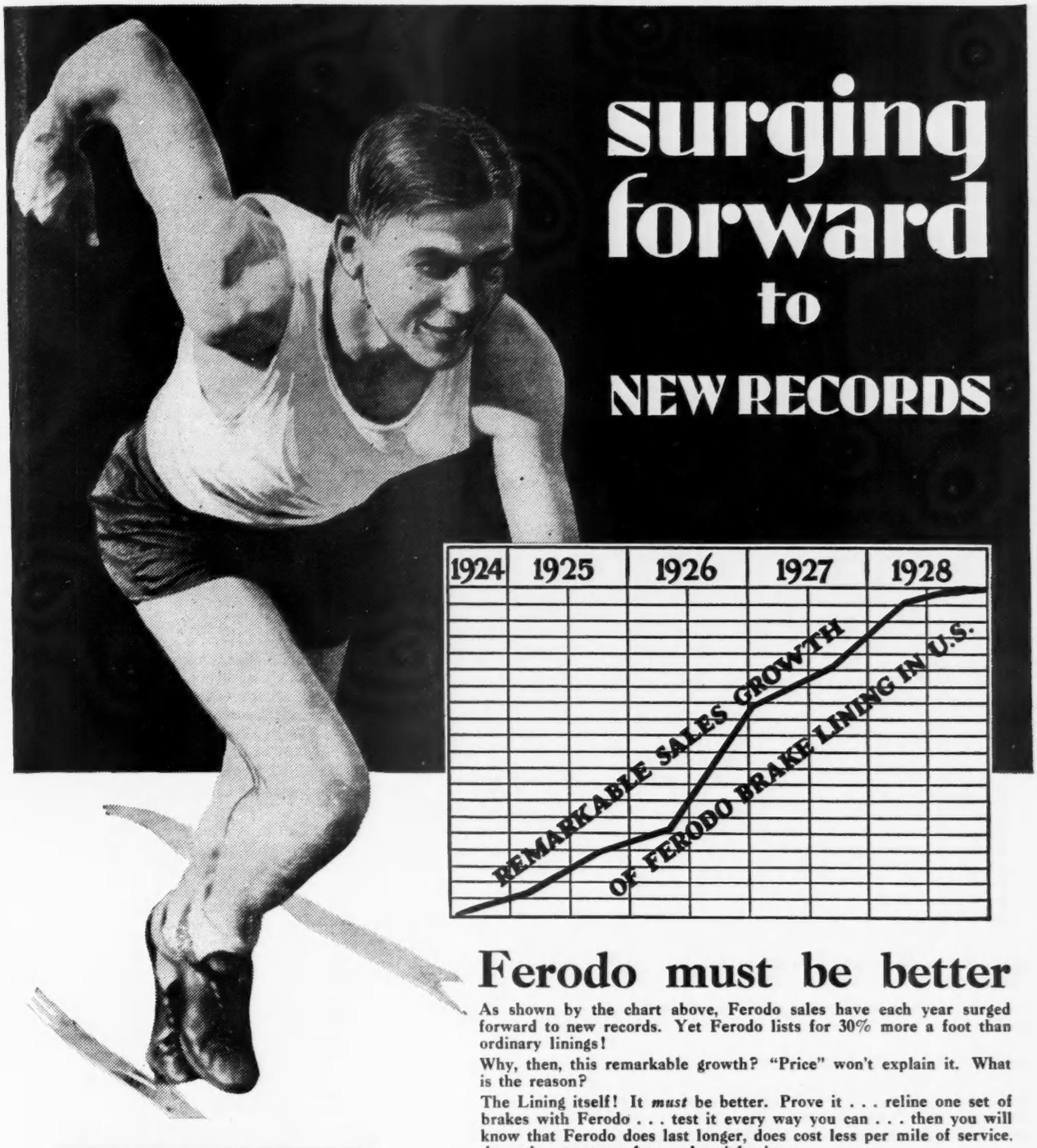
New Policies Demand Good Salesman

(Continued from page 25)

which, it is assumed, are contemplated as well by those companies which are adopting the new system. It is essential, for example, that the dealer in selling a truck stick rigidly to the tire equipment of the standard job, that the gross weight be honestly set in the first place and that dealers not only live up to their guarantee on the truck, but that they be equally firm in refusing to permit operation of the guarantee when excess loads are clearly the cause of the operator's difficulties.

None of these requirements detract in any sense from the soundness and constructiveness of the new gross weight rating policy; they are mentioned merely to emphasize the fact that the need for their existence is not eliminated under the new plan.

Just as in the case of the new weight rating, the policy of eliminating excess trading allowances seems almost certain to have a tendency to force out of the field those dealers and salesmen who lack understanding of truck transportation and who lack courage to maintain list prices under severe competitive conditions. By the same token again, it would seem to place a high premium on the dealer who is interested in building a steady, sound business on a solid foundation and to offer definitely increased profit opportunities to such retailers and such salesmen. Whatever any individual dealer may think about the policies *per se*, these implications seem unavoidable.



surging forward to NEW RECORDS

Ferodo must be better

As shown by the chart above, Ferodo sales have each year surged forward to new records. Yet Ferodo lists for 30% more a foot than ordinary linings!

Why, then, this remarkable growth? "Price" won't explain it. What is the reason?

The Lining itself! It *must* be better. Prove it . . . reline one set of brakes with Ferodo . . . test it every way you can . . . then you will know that Ferodo does last longer, does cost less per mile of service. does give greater safety and satisfaction.

10 Points of Superiority:

1. High Average wear-life.
2. Constant Gripping Power (coefficient of friction) to over 550° F.
3. Safe brakes in wet weather.
4. Will not burn out.
5. Fewer adjustments.
6. No swelling or shrinkage.
7. Size accuracy — within tolerance of .005".
8. No glazing.
9. Silent, smooth operation.
10. Cheaper per mile of service.

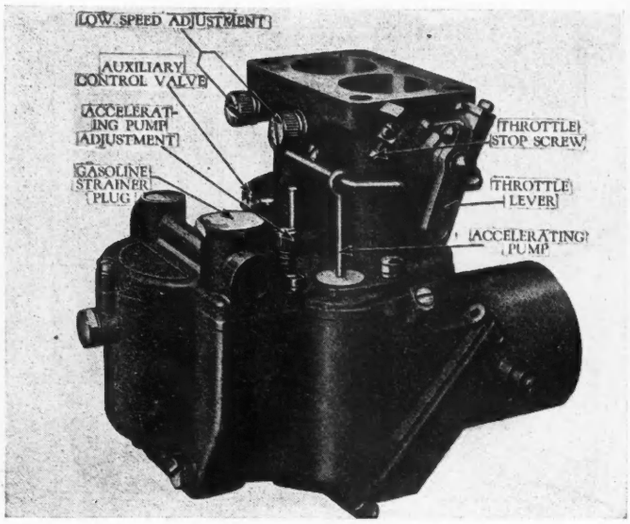
FERODO AND ASBESTOS
INCORPORATED
New Brunswick, New Jersey

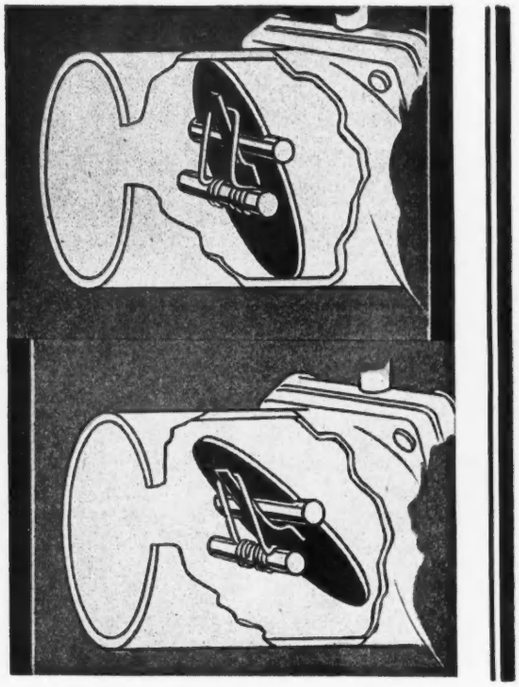
E. 3-29

FERODO
REGISTERED
BRAKE LINING

STUDEBAKER 8

(Continued from page 39)





Left—Stromberg dual type carburetor has only two adjustments. Right—The choke valve is attached to its shaft by a spring which deflects and opens the valve as the engine starts to fire

speed. Springs, which are made by Studebaker, are heavier and wider with stronger shackles and larger bolts.

Two tubular cross-members and five of pressed steel are used in the frame of Models 88 and 99, while Model 77 is provided with one tubular cross-member and five of pressed steel.

Four-wheel brakes are of Bendix three-shoe type and are operated by a Westinghouse vacuum amplifier. Hand brake is of the disk type and is mounted at the rear of the transmission.

The carburetor is a dual type Stromberg Model U U-2. The only adjustments are of the idle jet and the accelerating pump. Idle adjusting screws are located on the carburetor riser barrels, at the front. Each screw controls the adjustment of four cylinders.

Idle adjustment is made with four cylinders firing and four out of action. Four cylinders may be cut off either by drawing one of the high tension wires out of the distributor or by closing one of the adjusting screws all the way. With the engine running on four cylinders, turn the adjusting screw counter-clockwise until the engine rolls and then turn the adjustment clockwise until the engine runs smoothly. Turning the screw in, gives a leaner mixture.

Repeat this adjustment on the other adjusting screw with the other four cylinders firing. Before allowing the engine to run again on eight adjust the throttle stop screw until the engine runs as slowly as possible.

Adjustment of accelerating pump is between the strainer plug and the throttle barrel. Average adjustment is about one turn open. To check the adjustment retard the spark lever one-half way and pull the throttle wide open quickly. The engine should accelerate without hesitation. If the engine misses when accelerating from 4 m.p.h. in high, the accelerating charge is too small. If the engine is sluggish after a long hard drive, the charge probably is too large. Turning the adjustment screw clockwise reduces accelerating charge.

MAIN BEARINGS No. 5

Journal size	2.624 to 2.625
Diametral clearance	.002
Bearing shells furnished	standard and .005, .010 and .015 undersize
Adjustment	none
Bearing controls end play of crankshaft	front
End clearance this bearing	.006 to .008

CONNECTING ROD BEARINGS

Crank pin size	2.249 to 2.250
Diametral clearance	.0015 to .002
Bearing sizes furnished	standard and .010 or .020
Adjustment	none
Bearing shell	integral

PISTON

Material	Bohnalite
Pin locks in	rod
Clearance in cylinder	.0015 to .002
Pin fit: Light push fit with slight drag in piston at 70 degrees	
Installation: Put slot opposite camshaft	
Piston and rod assemblies remove through top	

CAMSHAFT

Clearance front bearing	.0025
Clearance other bearings	.003
OIL PRESSURE	30 lbs. at high speed

VALVE TAPPET CLEARANCE

Intake, hot	.004
cold	.003
Exhaust, hot	.006
cold	.007
BREAKER POINT GAP	.018 to .024
GENERATOR CHARGING RATE	10 to 12 amp., hot

Ignition distributor has hand and automatic advance.

Fan belt adjustment, by moving fan pulley. Adjust so it is just possible to move fan with belt stationary.

Engine oil should be S. A. E. viscosity No. 20 in summer and No. 10 in winter.

Flywheel and crankshaft flange should be "timed" by mark "0" on each.

Production Bodies and Cabs

(Continued from page 29)

riveted heads make up the rack, which as the body is lowered curves back into a dust-tight case. When in a hoisting position, the rack, which arcs slightly toward the body, is rigid and claimed to be able to carry twice the load specified for it.

Lift is exerted at the center and toward the front of the body and is said to require only 5 per cent of the power available at the take-off from the transmission. Double bevel gears and worm gearing are used in power transmission. The hoist parts are of alloy steel, machine cut gears, operating in an oil-tight gear case, bronze bushings and ball bearings with adjustments to .001 in. tolerance.

Operation is controlled by a lever at the seat having three positions: Forward, to lift; back, to lower; and center, neutral. At neutral the body is held at any point. Automatic cut-offs stop motion at the highest angle, 55 deg. and at riding position. The body can be operated while the truck is in motion. The Ditwiler installation on the Chevrolet chassis is being distributed through Hercules Products, Inc., Evansville, Ind., and through the Warford Corp. of Canada.

When . . .

the 3 LEADING TRUCKS *adopt*

LOCKHEED HYDRAULIC *Four* BRAKES *Wheel*

—as they have—it means, unmistakably, that Lockheed Hydraulics are the best brakes made for a motor truck.

The Tendency

in motor truck brake design, is toward Lockheed Hydraulics. Truck manufacturers want Lockheed Hydraulic Four-Wheel Brakes because they are effective at high speeds and with heavy loads—because, in a word, they fully meet today's road and driving conditions.

HYDRAULIC BRAKE COMPANY, DETROIT, MICHIGAN, U. S. A.

SMALL BUSINESSES

(*Continued from page 23*)

Their percentage distribution by size is indicated in graphic chart No. 1, according to annual sales of less than a given amount in thousands of dollars. About 28 per cent had annual sales of less than $5,000, 46 per cent had less than $10,000, and about 75 per cent had less than $25,000. Assuming 300 business days per year, an annual sales volume of $25,000 would average $83 per day, not a large business surely, and yet 75 per cent of retail stores appear to be doing less than this.

This evidence with regard to the size of business units in three important branches of industry presents a picture which I believe we may take as representative of all business activity in general. It demonstrates the great proportion of business and productive units of small size. This, I believe, is a natural fertile field for a large amount of professional hauling and the indications are that there is room for a tremendous development of this type of work for motor trucks. Instead of 7 per cent of the trucks being used for this work, I believe the economic advantage of the country requires a much greater amount of professional hauling.

Considerable freight and package handling is done by such small concerns in passenger automobiles. For this purpose the driver must make special trips and the cost for his time and for operating his vehicle is high considering the useful work done compared to the cost involved if these errands were done by professional haulers in the course of their regularly scheduled trips. In our largest and most congested communities, professional hauling is on the increase for the reason that it enables the motor truck to obtain a greater load factor, that is, a closer approach to full capacity loads for the entire distance traveled. This type of service also meets an economic need in carrying commerce into the less thickly settled districts radiating from population centers and is meeting the requirements for development of new industrial activity in localities otherwise inaccessible.

In view of the great possibilities which seem apparent for professional hauling, let us digress for a few moments to consider why this field has not been more fully developed, and to speak of some of the problems involved.

A considerable amount of the professional hauling now done by truckmen is inefficiently handled, and the conditions under which it is done, because of lack of organization, do not avail the customer of the real economy in the saving of time of which the motor truck is capable. I believe it is evident from the considerations which have been given, that, providing professional hauling operations are established on an efficient and economic basis and their services sold according to good merchandising principles, a tremendous expansion is in view for this type of work.

One of the serious obstacles or disadvantages in the commercial hauling business is the fact that the trucking operator is constantly liable to competition from men who have found it very easy to get into the trucking business and yet have an entire lack of appreciation of the necessary factors to be considered in computing their costs with the result that they quote cut-rates. It is not likely that this will be remedied for a considerable time, and the trucking business may always be liable to this type of competition. The successful establishment and continuance of professional hauling business depends, therefore, on its efficient management. It depends almost entirely on the truck operator.

The professional hauler has only one thing to sell, and that is service. Prompt, efficient and reliable service with a record for responsibility and prompt meeting of all claims is the only basis on which to justify the higher rates which must be charged in order to support a profitable operation. Good judgment, honest dealing, and the best methods worked out continually in order to keep abreast of the times must be used for its success.

An organized effort to obtain business is probably the first essential; the second, undoubtedly, an adequate and reliable system of records in order that information may always be available as to goods previously handled and in order that from the records reliable information as to cost may be obtained as a basis for the management of the business. Third, it is scarcely possible to overestimate the importance of proper selection and reasonable use of the hauling equipment. A fourth fundamental factor is efficient routing of trucks to avoid unprofitable mileage. Further, equipment must be kept clean, well painted, and attractive, and its mechanical condition must be given regular attention in order that economy may be obtained in the operation.

In order to promote a greater volume of common carrier business for motor trucks, it is necessary to overcome the force of habit of shippers not previously using this facility. Other methods of distribution have been long established and a positive stimulus must be used to overcome custom. This can only be done by an energetic campaign of education on the advantages of motor trucking when properly handled, and by the giving of first-class service to all people who give the professional hauler a trial.

TRUCKS PAY WAY

(*Continued from page 21*)

TABLE 1—HIGHWAY INCOME

Source	1921			1927		
Bonds	$438,109,273		38.1%	$272,260,720		18.6%
Federad Aid	79,333,226		6.9%	80,459,671		5.5%
Motor Veh. Fees	118,942,706		10.6%	299,513,810[1]		35.2%
Gasoline Taxes	3,683,460			216,678,981[1]		
Gen. Prop. Taxes	415,681,010	36.2%	44.4%	527,122,830	36.0%	40.7%
Miscellaneous	93,681,221	8.2%		69,040,192	4.7%	
Total	$1,149,430,896		100.0%	$1,465,076,204		100.0%

(1) Excluding collection costs, diversions, etc.

taxes compares with the figure of 35.2 per cent paid by the motor vehicle in registration fees and gasoline taxes alone.

Since rail taxes go to the general tax funds they may be said to be applied to highways in the same proportion as general taxes, as follows:

Taxes		Per Cent of General Tax Monies to Highways	Rail Payment to Highways
Federal	$86,031,118	2.3	$1,978,716
State	44,813,000	7.8	3,495,414
Local	246,177,959	12.2	30,033,710
Total	$377,022,077	9.4	$35,507,840

In the 34 states and the District of Columbia where motor truck taxes were segregated from the total registration in 1927, motor trucks were 13 per cent of the total registration and paid 23 per cent of the license fees.

The weighted national average tax for private automobiles is $10.70 license fee and $11 gas tax, making a total of $21.70 per unit. The average motor truck pays $22.20 and $27.60 in gas tax, a total of $49.80 per vehicle.

Registration fees for motor trucks range from $5 or less to more than $1,000 per vehicle depending, of course, upon the size.

Fageol 1-Tonner

(*Continued from page 41*)

carries the two-piece proceller shaft. The fender and front end construction of the Cub varies from regular construction. The fenders, made of heavy sheet steel are fastened to the front bumper, which in turn is fastened to the main frame side rails.

Standard equipment includes speedometer, Moto Meter, electric starter, headlights, tail light, electric horn, tire carrier, etc. Dash and floor boards or fully enclosed steel cab are furnished at extra cost.

Commercial Car Specifications—Corrected Monthly

The Specifications, Chassis Prices, Etc., Are Corrected Each Month From Data Supplied Direct by the Makers. Gasoline Tractor-Trucks Will be Found at the End of Gasoline Commercial Cars

Those Chassis Which Are Sold and Recommended for Bus Use Are Designated in the Following Table by Reference Sign (§) in Front of the Name

* Changes

† New Models

For Motor Bus Chassis See Pages 76 and 77

(Where prices are not given it is because we have been unable to get them from authoritative sources)

Key of abbreviations, page 78

Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Maximum Wheelbase furnished	General: Tire Size: Front (inches)	General: Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Engine: Fuel System: Carburetor (Make)	Engine: Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
1000 Pounds																																
Chevrolet Int. Com	400	107	107	B 4.50/20	B 4.50/20	Own	6-3 1/16x3 3/4	26.3	H	PG	Non	Har	Car	P	D-R	D-R	P. Own	Own Int.	U	3	Own	Own Int.	S	1/2	3.82	13.88	E*	OwnInt..	Own	.....	.....	1815
Dodge Brothers SE	665	110	110	B 29x5.00	B 29x5.00	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	McC	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	4.45	15.23	G*	Own	Gem	.....	.....	1965
Dodge Brothers SEW	675	110	110	B 31x5.25	B 31x5.25	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	McC	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	4.73	16.16	G*	Own	Gem	.....	.....	1995
Durant Com. Ch	495	107	.....	B 28x4.75	B 28x4.75	Con	4-3 3/8x4 1/4	18.2	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	A	3	Spi	Own	S	1/2	4.87	16.16	E*	Own	Own	.....	.....	1650
Fargo Packet	545	.....	.....	B 4.75/20	B 4.75/20	Own	4-3 5/8x4 1/2	21 03	L	FP	Non	Own	Car	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	4.7	.....	E†	Own	.....	.....	.....	1835
*General Motors T-11	625	109 5/8	.....	B 5.00/19	B 5.50/19	Pontiac	6-3 1/16x3 7/8	26.3	L	PC	Non	Lon	Mar	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	4.42	14.67	E*	Own	Jac	.....	.....	1885
Reo Speed Wagon Jr	895	115	.....	B 28x5.25	B 28x5.25	Con 16E	6-3 5/8x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E	P. B&B	W-G	U	3	Spl	Sal	S	1/2	4.7	14.63	E†	Sal	Ros	.....	.....	2290
Stud. Erskine 52B	675	109	.....	B 30x5	B 30x5	Con 9F	6-2 3/4x4 1/2	18.2	L	PC	Non	Lon	Sch	V	D-R	D-R	D. Lon	W-G	U	3	Spi	Tim	S	1/2	5.12	15.6	H*	Tim	Gem	.....	.....	.....
1500 Pounds																																
Dodge Brothers DE	775	120	120	B 31x5.25	B 31x5.25	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2510
Dodge Brothers DEF	830	120	120	P 30x5	P 30x5	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2630
Dodge Brothers DEW	790	120	120	P 33x4 1/2	P 33x4 1/2	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	3	Spi	Own	S	1/2	5.1	17.4	G†	Own	Han	75 1/4	39 3/4	2535
Fargo Clipper	725	.....	.....	B 5.50/18	B 5.50/18	Own	6-3 5/8x4 1/2	23.4	L	FP	Non	Own	Str	V	D-R	D-R	P. Own	Own	U	3	Own	Own	S	1/2	.....	.....	E†	Own	.....	.....	.....	3175
Int. Harvester Spec. Del.	.....	124	124	B 30x5.25	B 30x5.25	Wau XA	4-3 1/2x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	Roc	M.M.	U	3	M-M	Eat 502	S	1/2	4.45	15.1	H*	Eat 200F	Ros	86 5/8	50 5/8	2200
Kleiber	1170	121	.....	B 30x5.50	B 30x5.50	Con	6-2 7/8x4 3/4	19.8	L	PC	Non	Fed	Str	V	D-R	D-R	B-L	B-L 20	U	3	Spl	Tim 52604	B	1/2	4.9	.....	H	Tim 11703H	Ros	84	86	2400
Rugby Fast Mail	725	110	.....	B 29x5.00	B 29x5.00	Con	6-2 7/8x4 3/4	19.8	L	PC	Non	Fed	Til	V	A-L	A-L	P. Own	Own	U	3	Spi	Own	S	1/2	4.45	14.8	E*	Own	Own	.....	.....	1760
Sanford S	....	120°	130	P 30x5	P 30x5	Con 31L	6-2 7/8x4 3/4	19.8	L	PC	Non	Fed	Str	V	D-R	D-R	D. B-L	B-L 20	U	3	Blo	Eat	B	1/2	5.37	22.3	G	Eat	Ros	78 1/2	35 1/4	2550
Stewart Buddy	895	118	118	B 30x5.50	B 30x5.50	Lyc	6-2 7/8x4 3/4	19.8	L	PC	Non	Own	Str	V	D-R	D-R	D. Own	Own	U	3	Own	Own	S	1/2	5.6	17.3	A	Own	Gem	77 1/8	40 1/8	2690
Velie	1165	112	112	B 30x5.25	B 30x5.25	Own	6-3 1/16x4 1/4	24.4	H	FP	.....	.....	Str	V	A-L	A-L	P. B&B	Roc	U	3	Cle	Own	S	1/2	4.9	.....	F	Own	Ros	54	34	2352
1 Ton																																
*Acme 14	....	125	.....	P 30x5	P 30x5	Con H8	4-3 5/8x4 1/2	18.2	L	PC	Non	Per	Til	V	A-L	A-L	P. B&B	W-G	U	3	Blo	Cla B365	S	1/2	5.66	20.1	A	Sal F	Ros	96	47	2650
*Acme 16	....	125	.....	P 30x5	P 30x5	Con 29L	6-2 7/8x4 3/4	19.8	L	PC	Non	Per	Til	V	A-L	A-L	P. B&B	W-G	U	3	Blo	Cla B365	S	1/2	5.66	20.1	A	Sal F	Ros	96	47	2650
Acorn 20P	1185	132	.....	B 32x6.00	B 32x6.00	Con 15C	6-3 5/8x4 5/8	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful DU10	U	3	Spi	.....	B	1/2	4.5	.....	.....	.....	Lav	.....	.....	3500
Betz J3	....	140	Opt	P 32x6	P 32x6	Bud WTU	4-3 3/4x5 1/2	22.5	L	PC	Mon	Chi	Zen	V	Bos-A	A-L	D. Ful	Ful	U	3	Pet	Tim	B	F	.....	.....	E	Tim	Ros	.....	.....	3250
Betz J3-6	....	153	.....	P 32x6	DP32x6	Bud HS6	3-3 5/8x4 1/2	27.3	L	PC	Mon	Chi	Zen	V	A-L	A-L	D. Ful	Ful	U	3	Pet	Tim	B	F	.....	.....	E	Tim	Ros	.....	.....	3500
*Biederman	....	138	.....	P 30x5	P 30x5	Con 8R	6-3 5/8x4 1/2	27.3	L	PC	Non	Own	Zen	G	D-R	A-L	D. B-L	B-L 31	U	3	Spi	Cla	B	1/2	5.5	27.	A†	Shu	Ros	92	.....	3200
Clydesdale 16	....	140	.....	P 34x5	P 34x5	Con S4	4-4 1/4x4 1/2	28.9	L	FP	Non	Own	Zen	V	Bos-A	Bos-A	D. B-L	B-L 31	U	3	Spi	Tim 5620	B*	F	6.43	30.86	A	Tim 1250	Ros	.....	.....	3450
*Commerce 20Y	1600	142	.....	P 30x5	P 30x5	Bud HS6	6-3 5/8x4 1/2	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Col 54028	S	F	5.1	25.5	E	Col 5530	Han	103 1/2	63	3900
*Day-Elder MF	1345	131	131	P 30x5	P 30x5	Con 16C	6-3 5/8x4 5/8	27.3	L	FP	Non	G&O	Zen	V	D-R	D-R	D. Ful	Ful DU10	U	3	Spi	Tim 52000H	B	F	5.83	25.14	A	Tim 11703H	Ros	103 1/2	56	3100
Denby 41	....	128	.....	P 34x5	P 34x5	Her O	4-4x5	25.6	L	PC	.....	Lon	Zen	G	A-L	A-L	D. Ful	Ful	U	3	U-P	Col 54005	S	3/4	5.8	23.2	...	Con	Ros	.....	.....	3315
*Diamond T151	1095	132	.....	P 30x5	P 30x5	Con 18E	6-3 5/8x4	27.3	L	PC	Non	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	3	Spi	Col	S	1/2	5.12	18.6	G†	Col 3203	Ros	96	.....	3200
*Dodge Brothers BE	995	130	130	P 30x5	P 30x5	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.1	23.76	G†	Own	Han	85 3/4	49 3/4	2920
*Dodge Brothers, BEW	1030	130	130	P 33x5	P 33x5	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.67	26.40	G†	Own	Han	85 3/4	49 3/4	2950
*Dodge Brothers IEF	1110	140	140	P 32x6	P 32x6	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.7	26.40	G†	Own	Han	95 3/4	59 3/4	2995
*Dodge Brothers BEF	1040	130	130	P 32x6	P 32x6	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.7	26.40	G†	Own	Han	85 3/4	59 3/4	2965
*Dodge Brothers IE	1065	140	140	P 30x5	P 30x5	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5.1	23.76	G†	Own	Han	95 3/4	59 3/4	2955
*Dodge Brothers IEW	1100	140	140	P 33x5	P 33x5	Own	6-3 5/8x3 7/8	27.3	L	PC	Non	Fed	Ste	V	N-E	N-E	P. B&B	W-G	U	4	U-P	Own	S	1/2	5 67	26.40	G†	Own	Han	95 3/4	59 3/4	2985
Federal F6	....	123	135	P 30x5	P 30x5	Con 34L	6-2 7/8x4 3/4	19.8	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	U	3	Pet	Tim 5260	B	1/2	5.85	22.3	G	Own	Gem	91	51	2500
Federal Scout	....	123	135	P 30x5	P 30x5	Wau X	4-3 1/2x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	U	3	Pet	Tim 5260	B	1/2	5.85	22.3	G	Own	Gem	91	51	2400
Fisher Jr. Express	....	140	140	P 30x5	P 30x5	Con 31L	6-2 7/8x4 3/4	19.8	L	FP	Non	Per	Ste	V	A-L	A-L	. Lon	M.M L U	U	3	Blo	Sal F	S	1/2	6.1	.....	A*	Sal F	Ros	108	73 1/2	2500
*Garford 20Y	1600	142	.....	P 30x5	P 30x5	Bud HS6	6-3 5/8x4 1/2	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Col 54028	S	F	5.1	25.5	E	Col 5530	Han	103 1/2	63	3900
*General Motors T-19	895	127 3/4	145 3/4	P 5.50/20	P 32x6	Pontiac	6-3 7/16x2 7/8	26.3	L	PC	Non	Lon	Mar	P	D-R	D-R	.....	Own	U	4	Own	Tim 5261H	S	1/2	6.14	34.11	E*	Tim 11710N	Jac	.....	.....	2800
Gramm 263N	1485	133 6	174	P 30x5	P 32x6	Lyc S	6-3 1/4x4 1/2	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1002	B	1/2	5.66	22.6	A*	Col 5300	Ros	97	57 1/2	3585
Gramm-Bernstein 10	....	129	146	P 30x5	P 30x5	Lyc CT	4-3 3/4x5	22 5	L	PC	Non	Own	Zen	G	A-L	A-L	D. Mun	Mun T23	U	3	Pic	Sal A	B	3/4	5.85	23.08	B*	Sal D	Ros	97	57 1/2	3020
Hahn 5J4	....	138	138	P 30x5	P 30x5	Her O	4-4x5	25.6	L	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 30	U	3	Pet	Eat 1002	S	1/2	5.33	21.8	A	Eat 750	Ros	103	63 1/2	3100
Hahn 5J6	....	138	144	P 30x5	P 30x5	Bud HS6	6-3 5/8x4 1/2	27.3	L	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 30	U	3	Pet	Eat 1002	S	1/2	5.33	21.8	A	Eat 750	Ros	103	66	3200
Indiana 200	....	137	137	P 30x5	P 32x6	Wis F	6-3 1/4x4 1/4	25.3	H	PC	Non	Lon	Zen	V	A-L	A-L	P. B&B	B-L 20A	U	3	Spi	Col 36000	B	1/2	5.12	21.3	G*	Col 3200	Ros	96	56	3435
Int. Harv'tr 6 Sp. Spec.	....	124	124	P 30x5	P 30x5	Wau XA	4-3 1/2x4 1/2	19.6	L	PC	Non	Lon	Zen	V	D-R	D-R	. Roc	M.M.	U	3	M.M.	Eat 1124*	S	1/2	5.29	52.6	H*	Eat 430F	Ros	86 3/8	50 5/8	2430
Kissel	....	140	.....	P 34x5	P 34x5	Own	4-3 7/16x5 1/2	24.1	L	SP	Non	McC	Str	V	D-R	D-R	D. W-G	W-G T38L	U	3	Spi	Tim 6258	W	F	5.16	18.88	A*	Tim 1452	Ros	.....	.....	3780
Kleiber	1450	140	140	P 30x5	P 30x5	Con	6-3 5/8x4	27.3	L	PC	Non	Own	Str	G	D-R	D-R	D. B-L	B-L 20	U	3	Spi	Tim 5260	B	1/2	5.36	.....	B†	Tim 12307	Ros	100	64	3000
*Larrabee 20	....	143	160	P 30x5	P 30x5	Con 16C	6-3 5/8x4 5/8	27.3	L	PC	Non	Pet	Zen	G	D-R	D-R	D. B-L	B-L	U	3	Spi	Col	B	F	.....	.....	E†	Col	Ros	96	54 A	3745

Key of abbreviations, page 78

Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)
1 Ton—Cont'd																
Le Moon H10	1500	130	140	P 30x5	P 30x5	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Chi	Str	G	D-R	DJ
Luedinghaus	....	130	172	P 30x5	P 30x5	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	G	Eis	A-L
†Relay 20B	1700	142	....	P 30x5	P 30.5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L
Reo DA	995	123	138	P 30x5	P 30x5	Con 16E	6-3⅜x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E
Reo DC	1075	138	....	P 30x5	P 30x5	Con 16E	6-3⅜x4	27.3	L	PC	Non	Har	Sch	V	N-E	N-E
Rugby Exp.	975	128	....	P 30x5	P 30x5	Con	6-2¾x4¾	18.2	L	PC	Non	Fed	Til	V	A-L	A-L
Sanford A.	....	130°	140	P 30x5	P 30x5	Con 31L	6-2⅞x4¾	19.8	L	PC	Non	Fed	Str	V	D-R	D-R
*Service 20Y	1600	142	....	P 30x5	P 30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L
*Stewart Buddy	995	128	138	P 30x5	P 30x5	Lyc	6-2⅞x4¾	19.8	L	PC	Non	Fed	Str	G	D-R	D-R
*Studebaker GD-N	1075	140	....	P 30x5	P 30x5	Own	6-3⅜x4½	27.3	L	PC	Non	Lon	Str	G	D-R	D-R
*United 16	....	122½	....	P 32x4½	P 32x4½	Wau X	4-3½x4½	19.6	L	PC	Non	Per	Zen	G	A-L	A-L
United 16C	....	122½	....	P 32x4½	P 32x4½	Con 29L	6-2⅞x4¾	19.8	L	PC	Non	Per	Til	V	A-L	A-L
§U. S. U.	1850	138	162	P 34x5	P 34x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Str	V	A-L	A-L
Wachusett S.	....	152	152	S 34x5	S 34x5	Con 8R	4-3¾x5⅛	27.3	L	PC	Non	G&O	Zen	V	Bos-A	Bos-A
White 15B	1545	133½°	150	P 30x5	P 30x5	Own GKA	4-3¾x5⅛	22.5	L	PG	Non	Own	Zen	V	L-N	L-N
*White 60	1850	138°	157	P 30x5	P 30x5	Own 2A	6-3½x4½	29.4	L	FP	Non	Own	Zen	V	D-R	D-R
Willys Knight T-100	....	130	130	P 30x5	P 30x5	Own	6-2 15/16x3⅞	20.7	X	FP	Non	Own	Til	V	A-L	A-L
1¼ Ton																
Atterbury 26B	....	132	132	P 30x5	P 30x5	Lyc S	6-3¼x4½	25.3	L	PC	Non	Fed	Zen	G	A-L	A-L
Biederman	....	154	154	P 32x6	P 32x6	Con 8R	6-3⅜ 4¼	27.3	L	PC	Han	Own	Zen	G	D-R	A-L
Brockway Junior	....	130	130	P 30x5	P 30x5	Wis C	4-3¾x5	22.5	L	PC	Non	G&O	Zen	V	A-L	A-L
Brockway JF	....	137	.....	P 30x5	P 30x5	Wis F	6-3¼x4¼	25.3	H	PC	Non	G&O	Zen	V	A-L	A-L
Clinton 20B	....	150	Opt.	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Per	Zen	V	Spl	D-R
Clydesdale 10A	....	154°	.....	P 34x5	P 34x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Own	Zen	V	Bos-A	Bos-A
Corbitt 620	....	137	150	P 32x6	P 32x6	Con 18E	6-3⅜x4	27.3	L	FP	Non	Per	Zen	V	D-R	D-R
†Fageol 100	1300	144°	168	B 32x7.00	B32x7.00	Wau XA	4-3½x4½	19.6	H	PC	......	......	Zen	V	D-R	D-R
*Gotfredson B24	....	131	160	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	McC	Zen	V	D-R	D-R
Gramm 263 N	1485	133°	174	P 30x5	P 32x6	Lyc S	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L
Gramm Bernstein 10	....	129	146	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	G	A-L	A-L
Indiana 11X	....	120	120	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L
Indiana 11	....	129½°	165½	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L
*Int. Harvester S-24	....	130		P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Lon	Zen	V	D-R	D-R
*Int. Harvester S-26	....	130		P 30x5	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	V	D-R	D-R
Master 11	....	132	.....	P 35x5	P 35x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Chi	Zen	G	Bos-A	Bos-A
Moreland Ace	....	134	134	B32x6.75	B32x6.75	Con 34L	6-2⅞x4¾	19.8	L	PC	Non	Lon	Zen	V	A-L	A-L
Republic 75-6	....	128½	.....	P 30x5	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L
Republic 75	....	124°	.....	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	V	A-L	A-L
Sanford S.	....	120	130	P 30x5	P 30x5	Con	6-2⅞x4¾	19.7	...	FP	Non	Own	Str	P	D-R	D-R
Selden Pacemaker 25	....	142°	.....	S 30x5	S 30x5	Con S4	4-4¼x4½	28.9	L	PC	Non	Own	Str	G	D-R	D-R
Sterling DB7	....	137°	.....	P 32x6	P 32x6	Con 18E	6-3⅜x4	27.3	L	......	......	......	......	...	......	......
Stewart 16	1295	130	160	P 32x6	P 32x6	Lyc CT	4-3¾x5	22.5	L	FP	Non	Own	Str	G	D-R	D-R‡
Stewart 16X	1295	130	160	P 32x6	P 32x6	Lyc	6-3¼x4½	25.3	L	FP	Non	Own	Str	G	D-R	D-R
*United 20	....	128	.....	P 30x5	P 30x5	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	A-L	A-L
*United 20C6	....	128	.....	P 30x5	P 30x5	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	......	V	A-L	A-L
Valley	1295	132	142	P 33x5	P 33x5	Her	4-4x5	25.6	...	FP	Non	Har	......	V	D-R	D-R
†Victor 30	1595	131	180	P 30x5	P 30x5	Con 18E	6-3⅜x4	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R
White 57	2725	146°	157½	P 32x6	P 32x6	Own GRC	4-4x5¾	25.6	L	FP	Own	Own	Zen	V	L-N	L-N
Woods 20B4	....	129	129	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Per	Zen	V	D-R	D-R
Woods 20B6	....	129	129	P 30x5	P 30x5	Con 31L	6-2⅞x4¾	19.8	L	PC	Non	Per	Zen	V	D-R	D-R
1½ Ton																
*Acme 24	....	144	.....	P 30x5	P 30x5	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L
†Acme 26	....	144	.....	P 30x5	P 30x5	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L
Acorn 30	2300	144	.....	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	Bos-R	......
Acorn 30-P	2300	144	.....	P 30x5	DP30x5	Con 15C	6-3⅜x4⅝	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L
§Armleder 30	....	148°	187	S 34x4‡	S 34x6‡	Her OX	4-4x5	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L
Armleder 30B	....	150°	188	S 34x4‡	S 34x6‡	Bud KBU-I	4-4x5¼	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L
Armleder 30-6	....	153°	192	S 34x4‡	S 34x6‡	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L
Atterbury 26G4	....	145	160	P 30x5	DP30x5	Lyc C4	4-4x5	25.6	L	PC	Non	Fed	Zen	G	A-L	A-L
Atterbury 26G6	....	145	160	P 30x5	DP30x5	Lyc 4S	6-3¼x4½	25.3	L	PC	Non	Fed	Zen	G	A-L	A-L
Autocar SA	2700	150	174	P 32x6	P 32x6	Own	6-3¾x4½	33.7	L	PC	Non	Per	Zen	V	L-N	L-N
Betz F3	....	140	Opt	S 34x5	S 34x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Mon	Chi	Zen	V	Bos-A	A-L
Biederman	....	166°	170	S 34x5	S 34x8	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Own	Zen	G	D-R	D-R
Brockway CJB	....	142	142	P 32x6	P 32x6	Wis C	4-3¾x5	22.5	L	PC	Non	G&O	Zen	V	A-L	A-L
Brockway E	....	147½°	161	P 32x6	P 32x6	Wis SU	4-4x5	25.6	H	PC	Non	G&O	Zen	V	L-N	L-N
Brockway CJBF	....	149	.....	P 32x6	P 32x6	Wis F	6-3¼x4¼	25.3	L	PC	Non	G&O	Zen	V	A-L	A-L
Brockway EN	....	153¾°	169⅜	P 32x6	P 32x6	Wis N	6-3½x4¼	29.7	H	PC	Non	G&O	Zen	V	A-L	A-L

Trade Name and Model	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
1 Ton—Cont'd																
Le Moon H10	D. B-L	B-L 20	U	3	Spi	Cla B365	B	½	5.6	18.7	B	Tim 12300	Ros	96	66	3000
Luedinghaus	D. Ful	Ful SU10	U	3	.....	Tim 5260	B	½	.....	.....	A*	Shu 5410	Ros	120	72	2850
†Relay 20B	P. B-L	B-L 20	U	4	Blo	Own 20	R	F	5.14	25.7	E	Col 5530	Han	103½	63	4100
Reo DA	P. B&B	W-G	U	3	Pet	Own	S	½	5.22	18.47	E†	Own	Ros	85 41/64	44 11/16	2755
Reo DC	P. B&B	W-G	U	3	Pet	Own	S	½	5.22	18.47	E†	Own	Ros	99 3/16	59 5/16	2850
Rugby Exp.	P. Own	Own	A	4	Spi	Sal	S	½	5.39	22.4	E*	Sal	Gem	....	....	2510
Sanford A.	D. B-L	B-L 20	U	3	Blo	Eat	B	½	6.37	26.46	H	Eat	Ros	86¾	47	2930
*Service 20Y	P. B-L	B-L 20	U	4	Blo	Col 54028	B	F	5.1	25.5	E	Col 5530	Han	103½	63	3900
*Stewart Buddy	D. W-G	W-G	U	3	Spi	Sal	S	½	5.6	17.1	G*	Own	Gem	89⅛	50¾	2773
*Studebaker GD-N	P. Lon	Own	U	3	Spi	Own	S	½	4.64	13.7	G*	Own	Ros	90⅜	62⅜	2860
*United 16	P. B&B	W-G T 71	U	3	Blo	Cla B-365	S	½	5.66	17.0	A	Shu 5400	Ros	96	57	2400
United 16C	P. B&B	W-G T 71	U	3	Blo	Cla B-365	S	½	5.66	17.0	A	Shu 5400	Ros	94	55	2500
§U. S. U.	D. B-L	B-L 31	U	3	Blo	Cla B-501	B	½	6.25	30.0	A*	Shu 350	Lav	108	70	3400
Wachusett S.	D. B-L	B-L 30	U	3	Spi	Tim 5511	W	¾	5.5	22.5	...	Tim 1250	Ros	120	84	3300
White 15B	P. Own	Own 15	A	4	Spi	Own 15B	S	½	5.36	18.6	A*	Own 15	Own	96⅞	57⅜	3242
*White 60	P. Own	Own 3B	U	3	Spl	Own 4C	S	½	4.72	17.84	G†	Own 4D	Han	112	58¾	3562
Willys Knight T-100	P. B&B	W-G	U	3	M.M.	Tim 5260	S	½	6.14	26.22	E*	Own	Own	91	51	2700
1¼ Ton																
Atterbury 26B	D. B-L	B-L	U	3	Blo	Cla	B	½	5.6	18.7	A*	Shu	Gem	98½	55	3350
Biederman	D. B-L	B-L 31	U	3	Spi	Cla	B	½	7.2	35.0	A*	Shu	Ros	104	.....	3600
Brockway Junior	P. B&B	B-L 20	U	3	Spi	Col 36001	B	½	5.12	20.84	G*	Col 3204	Ros	96	56	3100
Brockway JF	P. B&B	B-L 20	U	3	Spi	Col 36001	B	½	5.12	20.84	G*	Col 3205	Ros	.....	.....	3450
Clinton 20B	D. B-L	B-L 31	U	3	Blo	Cla B501	B	½	6.28	29.5	A*	Shu 5405	Ros	Opt.	Opt.	3750
Clydesdale 10A	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A*	Tim 1250	Ros	.....	.....	3250
Corbitt 620	D. B-L	B-L 20	U	4	Spi	Tim 52000H	S	F	5.83	29.15	G†	Tim 11703H	Ros	108	64	3380
†Fageol 100	D. B-L	B-L 20	U	4	Spi	Tim 52000	B	F	5.57	27.85	G	Tim 11703H	Ros	120	73½	3675
*Gotfredson B24	P. B&B	B-L 20A	U	3	Spl	Tim 52000H	B	½	5.83	24.19	G	Tim 11704H	Ros	.....	.....	3200
Gramm 263 N	D. Cov	Cov	U	3	Blo	Eat 1002	S	½	5.66	22.6	A*	Col 5300	Ros	.....	.....	3585
Gramm Bernstein 10	D. Mun	Mun T23	U	3	Pic	Sal A	B	¼	5.85	23.4	B*	Sal D	Ros	97	57⅜	3020
Indiana 11X	P. B-L	B-L 31	U	3	Spi	Cla B365	S	½	5.1	24.48	A	Shu 5405	Ros	52 9/16	44 11/16	3350
Indiana 11	P B&B	B-L 31	U	3	Spi	Cla B365	S	½	5.1	24.48	A	Shu 5405	Ros	99	54 5/16	3500
*Int. Harvester S-24	P. Lon	Own	U	3	M.M	Eat 1002	S	½	5.33	21.3	H*	Eat 430F	CAS	94	51½	3200
*Int. Harvester S-26	P. Lon	Own	U	3	M.M.	Eat 1002	S	½	5.33	21.3	H*	Eat 430F	CAS	94	51½	3250
Master 11	D. Ful	Ful SU	U	3	Spi	Cla	S	½	5.5	22.0	A*	Tim	Ros	.....	.....	3000
Moreland Ace	D. B-L	B-L 20	U	4	Cle	Tim 52000H	S	F	5.83	29.17	G†	Tim 11793H	Ros	104	56	3000
Republic 75-6	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21.3	A*	Eat	Han	98	53¼	3150
Republic 75	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21	A*	Eat	Han	98	53¼	3000
Sanford S.	D. B-L	B-L	U	3	Blo	Eat	B	½	5.38	17.5	E*	Eat	Ros	75½	35½	2900
Selden Pacemaker 25	D. B-L	B-L 31	U	3	.....	Cla	B	½	.....	.....	A*	Shu	Ros	.....	.....	4300
Sterling DB7	......	......	......	4	Spi	Own	...	...	.....	.....	E	Own	.....	.....	.....	.....
Stewart 16	D. Ful	Ful SU-1	U	3	Spl	Cla B-365	S	¾	5.6	22.0		Col 3008	Gem	95¼	48⅝	2680
Stewart 16X	D. Ful	Ful	U	3	.....	Cla	S	½	5.6	22.0	G*	......	Gem	94¾	48⅝	3050
*United 20	D. B-L	B-L 20B	U	3	Blo	Cla B-365	B	½	5.66	17.00	A	Shu 5400	Ros	95⅝	52⅜	2900
*United 20C6	D. B-L	B-L 20B	U	3	Blo	Cla B-365	B	½	5.66	17.0	A	Shu 5400	Ros	91¾	48½	2900
Valley	D. Ful	Ful	U	3	Own	Own	S	...	4.46	Opt	...	Own F	.....	.....	.....	.....
†Victor 30	D. Cov	Cov JUC	U	3	U-M	Tim	S	¾	5.1	20.4	G†	Tim	Ros	.....	.....	3000
White 57	P. Own	Own GRBB	U	4	Spi	Own 57	S		[illegible]	19.3		Own 57	Own	100⅞	62⅞	3774
Woods 20B4	D.B-L	B-L	U	4	Blo	Tim	S	½	5.57	......	A*	Shu	Ros	90	53	....
Woods 20B6	D. B-L	B-L	U	4	Blo	Tim	S	½	5.57	......	A*	Shu	Ros	90	53	3050
1½ Ton																
*Acme 24	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.2	A	Col 5400	Ros	102⅝	66⅝	3450
†Acme 26	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.2	A	Col 5400	Ros	102⅝	66⅝	3450
Acorn 30	D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt.	Opt.	A	Shu 350	Ros	.....	.....	4400
Acorn 30-P	D. Ful	Ful SU 12	U	3	Spi	Cla B365	S	½	Opt	Opt	A	Shu 350	Ros	.....	.....	
§Armleder 30	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅝	4400
Armleder 30B	D. B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅝	4400
Armleder 30-6	D B-L	B-L 35	U	4	Spi	Tim	W	½	7.25	39.0	A*	Tim	Ros	121	71⅜	4500
Atterbury 26G4	D. B-L	B-L	U	4	Spi	Tim	B	F	6.4	21.4	A*	Shu	Gem	120	68	4260
Atterbury 26G6	D. B-L	B-L	U	4	Spi	Tim	B	F	6.4	21.4	A*	Shu	Gem	120	68	4260
Autocar SA	P. Lon	B-L 35	U	4	Spi	Own SA	S	F	5.22	27.92	H	Tim 14703	Ros	115¼	63⅝	3900
Betz F3	D. Ful	Ful	U	3	Pet	Tim	W	F	.....	.....	E	Tim	Ros	.....	.....	4650
Biederman	D. B-L	B-L 31	U	3	Spi	Tim	W	½	7.75	38.0	A*	Shu	Ros	140	.....	46[illegible]0
Brockway CJB	P. B&B	B-L 20	U	3	Spi	Col 55001	B	F	5.12	20.84	G*	Col 3204	Ros	111	68	3200
Brockway E	D. B-L	B-L 30	U	3	Spi	Col 55001	B	F	5.12	20.84	G*	Col 5401	Ros	126¼	71¾	3870
Brockway CJBF	P. B&B	B-L 20	U	3	Spi	Col 55001	B	F	5.87	20.84	G*	Col 3205	Ros	111	68	[illegible]
Brockway EN	D. B-L	B-L 35	U	4	Spi	Col 55001	B	F	5.87	31.4	G*	Col 5402	Ros	124	71	[illegible]

Chevrolet Utility	545	131		P 30x5	P 30x5	Own	6-3 5/16x3¾	26.3	H	PG	Non	Har	Car		D-R	D-R	Own	Own	U	4	Own	Own	S	½	4.88		E	Owp	Own	86⅝	51¾	2350
Chicago 15A		135°	195	P 32x6	P 32x6	Wau V	4-4x5	25.6	L	FP	Wau	Chi	Zen	G	Apo	A-L*	D. B-L	B-L 35	U	4	Pet	Tim 5622H	B	F	5.37	28.7	G†	Tim 14733H	Ros	Opt	Opt	4800
Chicago 16A		135°	195	P 32x6	DP32x6	Wau XK	6-3¾x4½	33.7	L	FP	Wau	Chi	Zen	G	Apo	A-L*	D. B-L	B-L 35	U	4	Pet	Tim 5622H	B	F	5.37	28.7	G†	Tim 14733H	Ros	Opt	Opt	5045
Clinton 32		150	Opt.	P 32x6	P 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Per	Zen	V	Spl	D-R	D. B-L	B-L 31	U	3	Blo	Cla 501	B	½	6.28	29.5	A*	Shu 5405	Ros	Opt	Opt	3950
Clydesdale 12		153		P 32x6	P 32x6	Con 8-R	6-3⅜x4½	27.3	L	PC	Non	Own	Str	V	Bos-A	Bos-A	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A*	Tim 1250	Ros			3600
Clydesdale 14		174		P 32x6	P 32x6	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Own	Str	V	Bos-A	Bos-A	D. B-L	B-L 31	U	3	Spi	Tim 6258	W	½	6.75	32.4	A*	Tim 1250	Ros			3700
*Commerce 30Z	2900	168		P 34x5	DP34x5	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4700
*Commerce S11Z	1900	162		P 30x5	DP30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Tim 54000	S	F	5.8	29.2	E	Col 5530	Han	133½	83	4300
Corbitt 630		150	170	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 20	U	4	Spi	Tim 54000H	S	F	5.83	29.15	G†	Tim 12703H	Ros	144	78	3860
*Day-Elder GF		149	180	P 30x5	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Bus	Zen	V	D-R	D-R	D. Ful	Ful DU10	U	3	Spi	Tim 5622H	B	F	6.83	29.3	A	Tim 12703H	Ros	122	62½	3900
Denby 41A		128		P 34x5	P 36x6	Her O	4-4x5	25.6	L	PC		Chi	Zen	G		D-R	D. Ful	Dur	U	3	U-P	Col	S	¾	5.8	23.2		Con	Ros			3365
Diamond T290	1475	156¼°	168	P 30x5	DP30x5	Her WXA	6-3⅜x4½	27.3	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Col	B	F	5.1		G†	Col	Ros			4160
Dodge Bros. ME	1345	150	150	P 32x6	P 32x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	5.67	36.83	G†	Own	Ros	106¾	69¾	3695
Dodge Bros. MER	1380	150	150	P 32x6	DP32x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	5.67	36.83	G†	Own	Ros	106¾	69¾	3740
Dodge Bros. MEW	1325	150	150	P 34x5	P 36x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Ros	106¾	69¾	3740
Dodge Bros. LE	1415	165	165	P 32x6	P 32x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	5.67	36.83	G†	Own	Ros	132¾	84¾	3810
Dodge Bros. LER	1450	165	165	P 32x6	DP32x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	5.67	36.83	G†	Own	Ros	132¾	84¾	3855
Dodge Bros. LEW	1395	165	165	P 34x5	P 36x6	Own	6-3⅜x3⅞	27.3	L	PC	Han	Fed	Ste	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Ros	132¾	84¾	3855
Douglas		150°		P 30x5	P 32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful	U	3	Blo	Wis 4627	R	F	6.57		A*	Shu 510	Ros	120	72	3950
Douglas		150°		P 30x5	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful	U	3	Blo	Wis 4627	R	F	6.57		A*	Shu 510	Ros	120	72	4100
*Douglas		116		P 30x5	DP30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Zen	V	Bos-R	Non	D. Ful	Ful	U	3	Blo	Wis 4627	R	F	6.57		A*	Shu 510	Ros	120	72	3900
Duplex GF		142		P 32x6	P 34x7	Bud WTU	4-3¾x5⅛	22.5	L	PS	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Tim 64600	W	½	6.50	34.8	A*	Shu 5410	Ros			4700
Duplex GS		142		P 32x6	P 34x7	Bud HS6	6-3⅜x4½	27.3	L	FP	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Tim 64600	W	½	6.50	34.8	A*	Shu 5410	Ros			4800
Fisher Fast Freight		146	160	S 30x5	S 32x6	Con S4	4-4¼x4½	28.9	L	FP	Non	Lon	Zen	V	Bos-A	Bos-A	D. Ful	Ful SU12	U	3	Blo	Col 5413	B	F	5.12	20.5	A*	Col 55005	Ros	120	79	3500
Ford A	460	131½		P 30x5	P 32x6	Own	4-3⅞x4¼	24.0	L	PG	Non	Own	Zen	G	Own	Own	P. Lon	Own	U	3†	Own	Own	W	¾	5.11	15.95	E*	Own	Own	81½	51	2386
Front Drive FT	2800	120	126	S 36x6‡	S 36x6‡	Bud WTU	4-3¾x5⅛	22.5	L	PC	Pie		Zen	V	Spl	Opt	P. B&B	Own FP	A	3	Own	Own D-2	W	½	7.25	32.5	B*	Own FTT	Ros	108	72	3350
*Garford 30Z	2990	168		P 34x5	DP34x5	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4700
*Garford S11Z	1900	162		P 30x5	DP30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Tim 54000	S	F	5.8	29.2	E	Col 5530	Han	133½	83	4300
General Motors T30	1395	136°	164	P 6.00/20	P 34x7	Buick	6-3 5/16x4⅝	26.3	I	PC	Han	Lon	Mar	P	D-R	D-R		Own	U	4	Spi	Eat	S	½	5.62	28.58	E*	Own	Jac			3907
*Gotfredson B36		165	196	P 32x6	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	McC	Zen	V	D-R	D-R	P. B&B	B-L 31	U	3	Spi.	Tim 54000H	B	F	6.16	29.57	G	Tim 12703H	Ros			4100
G-P 42-4		138	154	P 32x6	P 32x6	Lyc CT	4-3¾x5	22.5	L	PC	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 54000	S	F	5.83	31.4	G†	Tim 12703H	Ros			4100
G-P 42-6		138	154	P 32x6	P 32x6	Lyc S	6-3¾x4½	25.3	L	FP	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 54000	S	F	5.83	31.4	G†	Tim 12703H	Ros			4100
Gramm 363N	1485	133°	174	P 30x5	P 32x6	Lyc S	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1002	S	½	5.66	22.6	A*	Col 5300	Ros	97	57⅜	3585
Gramm Bernstein 115		146°	160	P 30x5	P 30x5	Lyc C4W	4-4x5	25.6	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B504	B	½	6.38	25.52	B*	Shu 5405	Ros	127	73⅞	3650
Guilder B		132		P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PS	Non	G&O	Zen	G	Eis	Bos-A	D. B-L	B-L	U	3	M-E	Cla 366			5.5		B*	Shu 5405	Ros			3250
Guilder B6	1750	132		P 30x5	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	G&O	Zen	V	D-R	D-R	D. Ful	Ful DU10	U	3	Spi	Cla B365	B	½	5.66	17.63	A*	Shu 5410	Ros			3250
Hahn 34		150	173½	P 32x6	P 32x6	Her O	4-4x5	25.6	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L 31	U	3	Pet	Eat 1504	S	½	6.33	30.38	A	Eat 750	Ros	118½	78½	3750
Hahn 36		154	177½	P 32x6	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L 31	U	3	Pet	Eat 1504	S	½	6.33	30.38	A	Eat 750	Ros	118½	78½	3850
Hawkeye 36		160°	160	S 34x4‡	S 34x7‡	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	G	N-E	N-E	D. Ful	Ful GU	U	4	Pic	Wis 6600	R	F	6.9	37.4	A*	Wis 11	Ros	133	86	4300
Hawkeye 30		160°	185	S 34x4‡	S 34x7‡	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Lon	Zen	G	Bos-R	N-E	D. Ful	Ful GU	U	4	Pic	Wis 6600	R	F	7.75	37.4	A*	Wis 11	Ros	133	86	4200
Huffman EH	1890	132		P 33x5	P 33x5	Her OX	4-4x5	25.6	L	PC		Har	Zen	V	A-L	A-L	D. Ful	Ful SU12	U	3	Spi	Own	S	½	4.46	17.84	A	Own	CAS			3460
Huffman EW	1560	132		P 33x5	P 33x5	Wis	4-3¾x5⅛	22.5	L	PC		Har	Zen	V	A-L	A-L	P. B&B	D-G	U	3	Spi	Own	S	½	4.46	17.84	A	Own	CAS			3185
Indiana 111		129°	165½	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	A-L	A-L	P. B&B	B-L 31	U	3	Spi	Cla B504	S	½	5.5	26.4	A*	Shu 5405	Ros	99	54 5/16	3600
Indiana 300		149	149	P 30x5	P 32x6	Wis F	6-3¼x4¼	25.3	H	PC	Non	Lon	Zen	V	A-L	A-L	P. B&B	B-L 20	U	3	Spi	Col 54030	B	¾	5.85	23.5	G*	Col 3200	Ros			3650
Indiana 350		155¾°		P 32x6	P 32x6	Wis N	6-3½x4¼	29.4	H	PC	Non	G&O	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Col 55001	B	F	5.87	31.4	G*	Col 5402	Ros			4420
*Int. Harvester SL-34		160	160	P 30x5	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	3	M.M.	Eat 1502	S	½	5.66	22.6	H*	Eat 430F	CAS	127¾	81	3595
*Int. Harvester SF-34		140°	160	P 32x6	P 30x5	Lyc CT	4-3¾x5	22.5	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	3	M.M.	Eat 1502	S	½	5.66	22.6	H*	Eat 430F	CAS	104	61½	3520
*Int. Harvester SL-36		160	160	P 30x5	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	3	M.M.	Eat 1502	S	½	5.66	22.6	H*	Eat 430F	CAS	127¾	81	3645
*Int. Harvester SF-36		140°	160	P 32x6	P 30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	3	M.M.	Eat 1502	S	½	5.66	22.6	H*	Eat 430F	CAS	104	61½	3570
Kenworth 45	1785	152	190	P 30x5	P 30x5	Bud WTU	4-3¾x5⅛	22.5	L	PC	Bud	Per	Zen	V	D-R	D-R	D. B-L	B-L 31	U	3	Spi	Cla 506	B	½	6.37	30.6	G†	Cla F304	Ros	110	71	3400
King Zeitler 35		140°		S 34x5‡	S 34x7‡	Con S4	4-4¼x4½	28.9	L	FP	Mon	Chi	Str	G	D-R	D-R	D. B-L	B-L 31	U	3	Blo	Tim 64600D	W	F	7.75	37.2	A*	Tim 14703	Ros			4500
Kissel		152		S 36x4‡	S 36x6‡	Own 40000	4-3⅞x5½	24.1	L	SP	Pie	McC	Str	V	Eis	D-R‡	D. W-G	W-G T-38L	U	3	Spi	Tim 6462	W	½	7.80	28.5	A*	Tim 1526	Ros			4100
Kleiber	1925	158	158	P 32x6	P 32x6	Con	6-3⅜x4½	27.3	L	FP	Non	Own	Str	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5622H	B	F	6.42		A†	Tim 12300H	Ros	126	76	4200
*Lange R	2050	140	172	P 32x6	P 32x6	Her WXB	6-3¾x4½	33.7	L	PC	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L 31	U	3	Cle	Tim 5622H	B	F	6.43	30.9	G	Tim 12703H	Ros	84	56	4550
*Larrabee 30		152⅛	161	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Zen	G	D-R	D-R	D. B-L	B-L	U	3	Spi	Col	B	F	Opt	Opt	E†	Col	Ros	108	63⅞	4125
LeMoon HB17	2000	151	166	P 30x5	DP30x5	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Chi	Str	G	D-R	DJ	D. B-L	B-L 31U	U	3	Spi	Tim 5622A	B	F	6.4	30.8	G	Tim 14703H	Ros	114	74	3900
Luedinghaus		144°	172	S 34x4‡	S 34x6‡	Wau V	4-4x5	25.6	L	PC	Non	Own	Zen	G	Eis	A-L	D. Ful	Ful SU10	U	3	Spi	Tim 5620	W	½			A*	Shu 5410	Ros	108	72	4500
*Maccar 36		154	170	P 32x6	DP32x6	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	D. B-L	B-L 20	U	4	Spi	Eat 1002	B	½	5.66	27.2	A*	Tim	Ros	107¾	68⅞	3700
Mack BB	3500	165½°		S 32x6	DS32x6	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	E	N-E	N-E	D. Own	Own AB	U	4	Spi	Own BB	R	F	*4.9	123.81	G*	*Own BB	Own			
Mack AB	3000	146½°		S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*7.10	34.4*	B*	Own AB	Own			
Mack AB	3450	164½°		S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*7.60	36.8*	B*	Own AB	Own			
Master 21		142°		S 34x4	S 36x7	Bud KBU-I	4-4x5¼	25.6	L	PC	Pie	Chi	Zen	V	Opt	Non	D. Ful	Ful SU	U	3	Spi	Tim 6462	W	½	Opt	Opt	A*	She 550	Ros			4000
Menominee HTN	1800	144	144	P 32x6	P 32x6	Wis SU	4-4x5	25.6	H	PC	Non	Per	Zen	V	Eis	A-L	P. B&B	Det KL	U	3	Blo	Col 54000	B	F	4.5	18.3	A	Col 5400	Ros	115	68	3250
*Oneida A-9		135		P 30x5	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PS	Non	Per	Str	V	A-L	A-L	Ful	Ful KU10	U	4	Blo	Tim 5620	S	F	6.42		A	Shu 350	Ros			3500
*Relay 30A	2990	168		P 34x5	DP34x5	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Own 30	R	F	6.45	34.5	E	Tim 14704H	Han	144	90	5300
†Relay S11B	1900	162		P 30x5	DP 30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Own 20	R	F	6.00	30.0	E	Col 5530	Han	133½	83	4500
†Reo FA	1295	137		P 32x6	P 32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Har.	Sch.	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	½	5.2	22.96	E†	Own	Han			
Reo FE	1395	152		P 32x6	P 32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Har	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	½	5.2	22.96	E†	Own	Han			
Reo FF	1395	156		P 32x6	P 32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Har	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	½	5.2	22.96	E†	Own	Han			
Republic 76		145½°		P 30x5	P 32x6	Lyc CT	4-3¾x5	22.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21.3	A*	Eat	Han	122	74¾	3350
Republic 76-6		150½°		P 30x5	P 32x6	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	5.33	21.3	A*	Eat	Han	122	74¾	3500
Sanford N		150°	170	P 32x6	P 32x6	Con 18C	6-3⅜x4	27.3	L	PC	Non	Fed	Str	V	D-R	D-R	D- B-L	B-L 20	U	4	Blo	Eat	B	½	6.37	31.67	H	Eat	Ros		66¼	3325
Schacht Series 20	1765	160	174	P 32x6	P 32x6	Con	6-3⅜x4⅝	27.3	L	FP	Non	You	Zen	O	D-R	D-R	D. B-L	B-L	U	4	Spi	Tim	S	F	5.83	31.19	G		Ros			
Selden 17		142	142	P 30x5	P 30x5	Con 18E	6-3⅜x4	27.3	L	PC	Non	Own	Str	V	D-R	D-R	P B&B	W-G	U	3	Blo	Col	B	½	5.1		E*	Col	Ros	110	66	3750
*Service 30Z	2990	168		P 34x5	DP34x5	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4700
*Service S11Z	1990	162		P 30x5	DP30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	P. B-L	B-L 20	U	4	Blo	Tim 54000	S	F	5.8	29.2	E	Col 5530	Han	133½	83	4300
Sterling DB 8-63		150	174	P 32x6	P 32x6	Own 6XL	6-3½x4½	29.4	L	PC	Wau	Own	Zen	V	L-N		D. B-L	B-L 31	U	3	Spi	Tim 5620	B	F	6.43	30.8	A	Tim 12300	Ros	124⅝	70⅝	3950
Stewart 24	1645	145	160	P 30x5	DP30x5	Lyc C4	4-4x5	25.6	L	PC	Non	Own	Str	G	D-R	D-R	D. Ful	Ful LTU4	U	4	Spi	Cla B-501	S	¾	7.28	47.0	G	Col 7003	Ros	114¾	63¾	3740
*Stewart 24X	1645	145	160	P 30x5	DP30x5	Lyc	6-3¼x4½	25.3	L	FP	Non	Own	Str	G	D-R	D-R	D.Ful	Ful	U	4	Spi	Cla	S	½	7.28	47.0	G*		Ros	114¾	63¾	3838
*United 30		148	168	P 30x5	P 30x5	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Eis	A-L	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.1	A	Shu 310	Ros	115⅜	75⅜	3500
*United 30C6		148	168	P 30x5	P 30x5	Con 8R	6-3⅜x4½	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Col 54000	S	F	5.85	28.1	A	Shu 310	Ros	110⅜	70⅝	3600
*U. S. L.	2450	148	166	P 32x6	P 34x7	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Own	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Cla I-D	I	D	7.60	36.5	A*	Shu 350	Lav	109	75	4200
*U. S. N	1950	144°	162	S 36x4	S 36x6	Bud	4-3¾x5½	22.5	L	PC	Non	Own	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Cla I-D	I	D	7.60	36.5	A*	Shu 350	Lav	120	72	4070
Valley	1595	132	142	P 30x5	P 30x5	Her	4-4x5	25.6		FP	Non	Har		V	D-R	D-R	D. Ful	Ful	U	4		Wis	R		Opt	Opt		Shu				
Velie 40 Sp. Truck	1395	148	148	P 32x6	P 32x6	Own	6-3 5/16x4⅝	24.4	H	FP	Non	G&O	Str	V	D-R	D-R	P. B&B	WG-	U	3	M.M.	Col 35000	B	½	5.5	18.1	E	Col 1600	Ros	107	63	3850
†Victor 35	1895	144	180	P 30x5	DP30x5	Con 18E	6-3⅜x4	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Cov	Cov JUC	U	3	U-M	Tim	S	¾	5.1	20.4	G†	Tim	Ros			3200

Key of abbreviations, page 78

Trade Name and Model	General: Chassis Price	General: Standard Wheelbase (inches)	General: Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
1½ Ton—Cont'd																																
Wachusett J.		148	152	S 36x6	S 36x6	Con J4	4-3¾x5	22.5	L	FP	Non	G&O	Zen	V	Bos-A	Bos-A	D. B-L	B-L 35	U	4	Spi	Tim 64600D	W	¾	7.20	38.5	*	Tim 15300	Ros	120	84	3300
Wachusett K.		154	170		......	Con K4	4-4⅛x5¼	27.2	L	FP	Non	G&O	Zen	V	Bos-A	Bos-A	D. B-L	B-L 35	U	4	Spi	Tim 6460	W	F	7.75	41.5	*	Tim 1520	Ros	144	102	4800
Willys Knight 15.		134	165	P 30x5	P 32x6	Own	6-2 15/16x4⅜	20.7	X	FP	Han	Own	Til	V	A-L	A-L	P. B&B	Ful DU	U	3	Blo	Eat 1002	S	½	5.66	24.3	E*	Own	Ros	96	56⅜	3300
White 20A.	2125	145½°	168	P 34x5	DP34x5	Own GKA	4-3¾x5⅛	22.5	L	PG	Non	Own	Zen	V	L-N	L-N	P. Own	Own 20A	A	4	Spi	Own 20A	R	½	9.25	32.1	A*	Own 20A	Own	106⅞	69⅜	4412
Witt-Will NN.	2850	144	172	S 36x4	S 36x7	Con S4	4-4¼x5½	28.9	L	PC	Non	Own	Zen	V	Eis	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64600D	W	½	7.25	30.3	A*	Tim 15300	Ros	136⅛	79⅛	4300
Witt-Will N6.		Opt		P 32x6	P 32x6	Con 15C	6-3¼x4⅝	25.3	L	PC	Non	Own	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64600D	:	:	:	:	:	Tim 15300	Ros	:	:	.....
†World D88.		147½	177½	P 30x5	DP30x5	Lyc	8-2⅞x4¾	26.4	L	PC	Han	Mod	Zen	O	A-L	A-L‡	P. Lon	Ful	U	4	Blo	Tim	S	F	6.16	37.	F	Shu	Han	118	71	4000
2 Ton																																
*Acme 44.		162	.....	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63720	W	F	6.25	33.4	A*	Tim 14703	Ros	132⅝	82⅝	4000
*Acme 46.		162	.....	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63720	W	F	7.33	39.2	A*	Tim 14703	Ros	132⅝	82⅝	4000
*Acme 340.		162	.....	P 32x6	P 32x6	Con S4	4-4¼x4½	28.9	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Tim 5620	S	F	6.16	29.6	E	Col 5408	Ros	132⅝	82⅝	4000
*Acme 346.		162	.....	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Per	Str	V	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Tim 5620	S	F	6.16	29.6	E	Col 5408	Ros	132⅝	82⅝	4000
Acorn 40.	2500	144	.....	S 36x4	S 36x7	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	Bos-R	.....	D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt	Opt	A	Shu 350	Ros	.....	.....	4600
Acorn 40P.	2600	144	.....	P 34x5	DP34x5	Con 15C	6-3⅜x4⅝	27.3	L	PC	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful SU 12	U	3	Spi	Cla B720	S	½	Opt	Opt	A	Shu 350	Ros	.....	.....	4800
Am. La France Chief.	2850	156	Opt.	P 32x6	DP32x6	Bud DW6	6-3¾x5	33.7	L	PC	Bud	G&O	Zen	V	D-R	D-R	P. B&B	Ful G7	A	4	Spi	Tim 63-700BX	W	F	5.00	24.0	E*	Tim 14703BX	Ros	Opt	Opt	5100
Armleder 40.		149	187	S 36x4	S 36x8	Her OX	4-4x5	25.6	L	PC	Non	Non	Lon	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	F	7.25	38.8	A*	Tim	Ros	121	72⅝	4600
Armleder 40-6.		154	200	S 36x4	S 36x8	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	F	7.25	38.8	A*	Tim	Ros	121	72⅝	4800
Autocar SD.	3000	150	174	P 32x6	DP32x6	Own	6-3¾x4½	33.7	L	PC	Non	Per	Zen	V	L-N	L-N	P. Lon	B-L 35	U	4	Spi	Own SD	R	F	6.33	33.86	H	Tim 14703	Ros	115¼	63⅝	4850
Brockway EYW.		156°	164	P 32x6	DP32x6	Wis Y	6-3⅜x5	27.3	H	PC	K.P.	G&O	Zen	V	L-N	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	6.00	32.1	G*	Col 5403	Ros	117¾	70¾	5090
*Brockway S.		150¼°	164¼	S 34x4‡	S 34x8‡	Wis SU	4-4x5	25.6	H	PC	K.P.	Bus	Zen	V	Eis	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	7.25	38.8	B*	Tim 14703	Ros	129	76⅝	5100
Brockway SY.		151¾°	178⅛	P 32x6	P 34x7	Wis Y	6-3⅜x5	27.3	H	PC	K.P.	G&O	Zen	V	L-N	L-N	D. B-L	B-L 35	U	4	Spi	Wis 4610	R	F	6.6	35.3	G*	Col 5403	Ros	129	73	5145
Chicago 20A.		135°	195	S 34x4	S 34x7	Wau V	4-4x5	25.6	L	FC	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 63720H	W	F	6.25	33.4	G†	Tim 14703H	Ros	Opt	Opt	4870
Chicago 21A		135°	195	P 32x6	DP32x6	Wau XK	6-3¾x4½	33.7	L	FC	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 63720H	W	F	6.25	33.4	G†	Tim 14703H	Ros	Opt	Opt	5115
Clinton 45.		163	Opt.	S 34x4‡	DS34x4‡	Bud KTU	4-4x5¼	25.6	L	PC	Wau	Per	Zen	V	Spl	D-R	D. B-L	B-L 35	A	4	Blo	Tim 64600	W	½	7.75	41.5	A*	Tim 15302	Ros	Opt	Opt	4875
Clydesdale 9.		160°	.....	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	FP	Own	Own	Zen	V	Bos-A	Bos-A	D. B-L	B-L 35	U	4	Spi	Tim 64600	W	½	7.75	41.46	A*	Tim 1460	Ros	.....	.....	4600
Coleman C-25.		109	144	P 34x7	P 34x7	Bud HS6	6-3⅜x4½	27.3	L	FP	Non	R-T	Str	V	D-R	D-R	D. Ful	Ful GU 12	U	8	Spi	Own	W	F	7.25	139.0	A*	Own	Ros	108	78	5360
*Commerce 40Z.	3240	168	.....	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4900
Corbitt 646.		150	198	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 63703H	W	F	7.33	39.23	G†	Tim 14703H	Ros	144	78	4980
†Corbitt 9B6.		150	181	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	D-L 35	U	4	Spi	Tim 54000H	S	F	5.83	29.15	G†	Tim 14703H	Ros	Opt	Opt	4200
*Day-Elder HF.		149	186	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Bus	Zen	V	D-R	D-R	D. Ful	Ful KU10	U	3	Spi	Tim 63702H	B	F	7.66	49.83	A	Tim 14703H	Ros	158	86½	4300
*Day-Elder HBF.		149	186	P 32x6	P 34x7	Con 16C	6-3⅜x4⅝	27.3	L	FP	Non	Bus	Zen	V	D-R	D-R	D. Ful	Ful KU10	U	3	Spi	Tim 5622H	B	F	6.83	44.39	A	Tim 14703H	Ros	158	86½	4400
*Diamond T302	1650	157¾°	176	P 32x6	DP32x6	Her WXB	6-3¾x4½	33.7	L	PC	Non	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Cla	S	½	5.66	33.1	E†	Cla	Ros	.....	.....	4060
Dixon.	2950	146	.....	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PS	Non	G&O	Zen	V	Eis	D-R	D. Ful	Ful GU	U	4	Spi	Tim 6462	W	½	7.75	40.0	A	Shu 5550	Ros	.....	.....	4600
*Dodge Brothers, ED.	1445	114	114	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	McC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3725
*Dodge Brothers, EDR.	1445	114	114	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	McC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3725
*Dodge Brothers, EDX.	1550	114	114	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	McC	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	57	37	3875
*Dodge Brothers, OE.	1545	150	150	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	3930
*Dodge Brothers, OER.	1545	150	150	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	3930
*Dodge Brothers, OEX.	1650	150	150	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	106¾	69¾	4080
*Dodge Brothers, TE.	1615	165	165	P 32x6	P 34x7	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4070
*Dodge Brothers, TER.	1615	165	165	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4070
*Dodge Brothers, TEX.	1720	165	165	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	KP	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	6.38	41.44	G†	Own	Han	132¾	84¾	4220
Douglas.		156°	.....	P 32x6	P 34x7	Bud KBU-1	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.9	33.12	A*	Shu 510	Ros	144	84	5100
Douglas.		168°	.....	P 32x6	P 34x7	Bud DW6	6-3¾x5	33.7	L	PC	Non	Own	Zen	V	L-N	L-N	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.33	30.38	A*	Shu 510	Ros	144	84	5850
Douglas.		118	.....	P 32x6	P 34x7	Bud KBU-I	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Bos-R	Non	D. Ful	Ful GU14	U	4	Blo	Wis 6617	R	F	6.33	30.38	A*	Shu 510	Ros	144	84	4500
Duplex S.		160	.....	P 32x6	P 36x8	Bud DW6	6-3¾x5	33.7	L	FP	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L	U	4	Pet	Tim 65600	W	F	6.75	36.2	A*	Shu 5510	Ros	.....	.....	5600
Fageol 130.	1925	156°	172	P 30x5	DP30x5	Wau V	4-4x5	25.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5260	B	F	4.62	22.2	G*	Tim 12300	Ros	83⅛	128⅞	4500
Fageol 135.	2100	162°	196	P 30x5	DP30x5	Wau XL	6-3½x4½	29.4	L	PC	Non	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5620	B	F	4.62	22.2	G†	Tim 12300	Ros	144	71⅛	4800
Federal A6.		151	176	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	A	4	Opt	Cla B506	B	½	6.37	31.87	G	Cla F304	Ros	119	71	3900
Federal T21.		115	.....	P 32x6	DP32x6	Wau V	4-4x5	25.6	L	PC	Wau	Lon	Zen	V	D-R	D-R	P. B&B	Own	A	4	Opt	Tim 64600D	W	½	7.25	36.2	A	Own	Gem	.....	.....	4000
Fisher Mer. Ex.		146	160	S 34x5	S 34x7	Con 15C	6-3⅜x4⅝	27.3	L	FP	Non	Lon	Zen	V	Bos-A	Bos-A	D. Cov	Cov W4C	U	4	Blo	Tim 63720H	W	½	7.33	42 8	A*	Tim 14703H	Ros	120	79	4100
Fisher Mer. Ex.		146	160	P 32x6	P 34x7	Con 15C	6-3⅜x4⅝	27.3	L	FP	Non	Lon	Zen	V	Bos-A	Bos-A	D. Cov	Cov W4C	U	4	Blo	Tim 5632H	B	½	6.16	36.0	A*	Tim 1230-2H	Ros	120	79	3900
*F.W.D.H.	3300	121	156	P 34x7	P 34x7	Wis SU	4-4x5	25.6	H	PC	.....	Per	Zen	V	Eis	N-E	D. Det	Cot A	A	4	Blo	Own	B	F	7.3	38.0	B	Own H	Ros	112	81	5300
*F. W. D. HT	3900	120	.....	P 36x8	P 36x8	Wis SU	4-4x5	25.6	H	PC	Non	Per	Zen	V	Eis	N-E	B-L	B-L	A	7	Blo	Own HT	B	F	6.95	84.7	B	Own H	Ros	115	80	6000
*Garford 40Z.	3240	168	.....	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4900
*General Motors T-42.	1685	136°	164	P 700/20	P 36x8	Buick	6-3 5/16x4⅝	26.3	I	PC	Han	Lon	Mar	P	D-R	D-R	.....	Own	U	4	Spi	Own	S	½	6.57	33.38	E*	Own	Jac	.....	.....	4305
Gotfredson W36.		165	196	P 32x6	P 34x7	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	McC	Zen	V	D-R	D-R	P. B&B	B-L 31	U	3	Spi	Tim 63721H	W	F	6.25	30.0	G	Tim 14703H	Ros	.....	.....	4500
G-P 47-4.		154	174	P 32x6	P 34x7	Lyc C4	4-4x5	25.6	L	PC	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 56000	B	F	6.14	32.8	G†	Tim 14703H	Ros	.....	.....	4800
G-P 47-6.		154	174	P 32x6	P 34x7	Lyc TH	6-3½x5	29.4	L	FP	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	M.M.	Tim 56000	B	F	6.14	32.8	G†:	Tim 14703H	Ros	.....	.....	4800
Gramm 463N.	1885	133°	196	P 32x6	P 34x7	Lyc S	6-3¼x4½	25.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. Cov	Cov	U	3	Blo	Eat 1504	S	½	6.62	62 5	A*	Col 5300	Ros	97	57⅜	3840
Gramm Bernstein 115S.		149½°	196	P 30x5	P 30x5	Con 15C	6-3⅜x4⅝	27.3	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B504	B	½	6.38	25.52	B*	Shu 5405	Ros	127	73[illegible]	3750
Gramm Bernstein 115.		146°	160	P 30x5	P 30x5	Lyc C4W	4-4x5	25.6	L	PC	Non	Own	Zen	G	A-L	A-L	D. Ful	Ful SU12	U	3	Blo	Cla B504	B	½	6.38	25.52	B*	Shu 5405	Ros	127	73⅞	3650
Gramm Bernstein B6.		144	.....	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	You	Zen	V	A-L	A-L	D. Ful	Ful KU10	U	4	Blo	Tim	B	F	5.83	37.89	G†	Tim	Ros	120½	73¾	4590
Guilder C6.	2050	148	.....	P 32x6	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	G&O	Zen	V	D-R	D-R	D. B-L	B-L 31	U	3	Spi	Cla 504	B	½	6.25	29.5	A*	Shu 5405	Ros	.....	.....	3400
Guilder E.	3150	152	.....	S 34x4	S 36x8	Bud KBU-1	4-4x5¼	25.6	L	PC	Pie	G&O	Zen	G	Eis	D-R	D. B-L	B-L 51	U	4	M-E	Wis 660	R	F	7.75	41.0	A*	Shu 5410	Ros	.....	.....	5100
Hahn 44.		150	177½	P 32x6	P 34x7	Her O	4-4x5	25.6	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Eat 1504	B	½	6.3	33.2	A	Shu 5410	Ros	118½	78½	4100
*Hahn 46.		154	177½	P 32x6	P 34x7	Bud HS	6-3⅜x4½	27.3	L	PC	Non	Chi	Zen	V	A-L	A-L	D. B-L	B-L	U	3	Pet	Eat 1504	B	½	6.3	33.2	A	Shu 5410	Ros	118½	78½	4200

Huffman BC	2795	140	...	S 34x4	S 34x6	Con S4	4-4¼x4½	28.9	L	FP	...	Chi	Zen	V	Eis	...	D. Ful	Ful SU12	U	3	Spi	Own	W	½	9.66	38.67	A	Shu	Lav	...	...	4160
Huffman BH	2295	140	...	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	FP	...	Chi	Zen	V	Eis	...	D. Ful	Ful SU12	U	3	Spi	Own	W	½	9.66	38.67	A	Shu	Lav	...	...	4160
*Hug 22	...	160	185	P 30x5	DP 30x5	Bud HS6	6-3⅜x4½	27.3	L	PC	Bud	You	Zen	V	A-L	D-R	D. B-L	Ful KU10	U	4	Blo	Cla B510	S	½	5.66	36.79	G	Cla 304	Ros	132	83	4280
*Hug 60	...	118	118	P 32x6	DP32x6	Bud WTU	4-3¾x5⅛	22.5	L	PC	Bud	You	Zen	V	Eis	D-R	D. Ful	B-L 51	U	4	Blo	Wis 660B	R	F	6.92	37.02	A	Shu 550	Ros	61½	52	5700
*Hug 66	...	130	...	P 32x6	DP32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Bud	You	Zen	V	A-L	D-R	D. B-L	B-L 51	U	4	Blo	Wis 660B	R	F	6.92	37.02	A	Shu 550	Ros	...	...	...
Indiana 400	...	157°	175	P 32x6	P 32x6	Wis Y	6-3⅜x5	27.3	...	PC	K.P.	Lon	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Cla 506	S	½	6.37	34.2	G*	Shu	Ros	120	71⅜	5035
Indiana 111X	...	120	120	P 32x6	DP32x6	Her OX	4-4x5	25.6	L	PC	Non	McC	Str	G	Eis	Non	P. B&B	B-L 35	U	4	Spi	Cla 504	S	½	6.28	30.14	A*	Shu 5405	Ros	50 3/16	42 13/16	3740
Indiana 115	...	150°	186 1/16	S 34x4	S 34x7	Her OX	4-4x5	25.6	L	PC	Non	Lon	Str	G	A-L	A-L	P. B&B	B-L 35	U	4	Spi	Tim 64600	W	½	6.5	34.7	B*	Shu 5410	Ros	126	75 1/16	4585
Int. Harvester SD-44	...	117	117	P 30x5	P 32x6	Lyc CT	4-3¾x5	22.5	L	PC	Non	Lon	Zen	V	Bos-A	Non	P. Lon	Own	U	4	M.M.	Eat 2002	S	½	6.87	40.6	H*	Eat 430A	CAS	42¾	38½	3700
Int. Harvester SD-46	...	117	117	P 30x5	P 32x6	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	V	Bos-A	Non	P. Lon	Own	U	4	M.M.	Eat 2002	S	½	6.87	40.6	H*	Eat 430A	CAS	42¾	38½	3750
Int. Harvester SF46	...	140°	164	P 32x6	P 34x7	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. Lon	Own	U	4	M.M.	Eat 2002	S	½	6.87	40.6	H*	Eat 430A	CAS	104	61½	3955
Kenworth 55	2085	163	195	P 32x6	P 32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Bud	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Cla 506	B	½	6.37	34.1	G†	Cla F304	Ros	125	83	3600
King Zeitler 42A	...	156°	...	P 32x6	DP32x6	Con 15C	6-3⅜x4⅝	27.3	L	FP	Han	Chi	Zen	G	A-L	A-L	D. B-L	B-L 31	U	3	Blo	Tim 5620	B	F	6.43	30.9	A*	Shu 5410	Ros	...	...	...
Kleiber	3100	147	170	S 36x4‡	S 36x7‡	Con K4	4-4⅛x5¼	27.2	L	FP	Non	R-T	Str	V	Bos-R	Non	D. B-L	B-L 50	A	4	Spi	Tim 64600D	W	½	7.75	41.5	A†	Tim 15300	Ros	144	88	5200
Kleiber	2450	170	156	P 32x6	DP32x6	Con	6-3⅜x4½	27.3	L	FP	Non	Own	Str	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 5620H	B	F	6.42	...	A†	Tim 1230H	Ros	150	87	4600
*Lange L	3450	145	186	P 32x6	DP32x6	Her YXA	6-3¼x4¾	33.7	L	PC	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Cle	Wis 6617	R	F	7.75	41.5	A*	Shu 510	Ros	106	65	5800
*Larrabee 40	...	164⅜	200	P 32x6	DP32x6	Con 16R	6-4x4⅛	38.4	H	PC	Non	Per	Zen	G	D-R	D-R	D. B-L	B-L	U	4	Spi	Wis	R	F	Opt	Opt	E†	Tim	Ros	126	72¾	5500
Le Moon HB20	2200	160	182	S 34x4	S34x7	Wau 6XK	6-3¾x4½	33.7	...	FP	Non	Chi	Str	G	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 63720H	W	F	6.25	30.0	G	Tim 14703H	Ros	126	81	4300
Le Moon HB21	2400	160	182	P 32x6	DP32x6	Wau 6XK	6-3¾x4½	33.7	...	FP	Non	Chi	Str	G	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 63720H	W	F	6.25	30.0	G	Tim 14703H	Ros	126	81	4500
Mack AB	3000	146½°	...	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*7.10	34.4*	B*	Own AB	Own	...	...	...
Mack AB	3450	164½°	...	S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*7.60	36.8*	B*	Own AB	Own	...	...	...
Menominee HX	...	132	160	P 32x6	P 32x6	Wis W	4-4⅛x5	27.2	H	PC	Non	Per	Zen	V	Eis	A-L	P. B&B	Cot AU	U	4	Pic	Wis 6600	R	F	6.33	32.9	A	Wis 21	Ros	100	67	4850
Moreland RR-6	1850	158½	...	P 32x6	P 32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 35	U	4	Cle	Tim 54000H	S	F	5.83	32.95	G†	Tim 12703H	Ros	132	78	4000
§Noble 146B	...	166	...	P 32x6	DP32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Chi	Str	V	A-L	A-L	D. Ful	Ful KU12	U	4	Blo	Tim 5620	B	F	6.42	...	...	Tim 14703	Ros	126	86	4805
Noble 146W	...	166	...	P 32x6	DP32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	Chi	Str	V	A-L	A-L	D. Ful	Ful KU12	U	4	Blo	Tim 63720D	W	F	6.25	...	...	Tim 14703	Ros	126	86	5310
*Oneida B-9	...	144	...	P 32x6	P 34x7	Wau V	4-4x5	25.6	L	PS	Non	Per	Str	...	A-L	A-L	Ful	Ful KU10	U	4	Blo	Tim 5620	S	F	6.42	...	A	Shu 350	Ros	...	...	4800
Pierce-Arrow XA	3500	150	162	S 36x4‡	DS36x5‡	Own XA	4-4x5½	25.6	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own XA	A	4	Spi	Own XA	W	½	8.5	44.2	A	Own XA	Own	125 7/16	72 7/16	6280
Pierce-Arrow FA	2450	140°	180	S 32x6	S 34x7	Own FA.	6-3½x5	29.4	L	FP	...	Fed	Str	E	D-R	D-R	P. B&B	B-L	U	3	Spi	Tim	B	F	5.28	33.3	E*	Own	Gem	106⅜	52⅜	3855
Rehberger A	...	162	180	S 36x4	S 36x7	Bud KTU	4-4x5¼	25.6	L	PC	K.P.	Bus	Zen	V	Eis	D-R‡	D. B-L	B-L 35	U	4	Spi	Tim 6462	W	½	7.75	41.5	A*	Shu 510	Ros	134	82	5060
*Relay 40A	3240	168	...	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.2	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Own 30	R	F	6.45	34.5	E	Tim 14704H	Han	144	90	5500
Reo FC	1595	152	...	P 30x5	DP30x5	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	½	5.7	37.62	E†	Own	Han	...	...	...
Reo FD	1695	168	...	P 30x5	DP30x5	Own	6-3x⅜5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	½	5.7	37.62	E†	Own	Han	...	...	...
Republic 88	...	110	...	P 30x5	DP30x5	Lyc C4	4-4x5	25.6	L	PC	Non	Own	Zen	V	A-L	...	D. Ful	Ful	U	3	U-M	Eat	B	½	6.62	26.5	A*	Eat	Han	53¾	39	3350
Republic 88-6	...	113¾	...	P 30x5	DP30x5	Lyc 4SG	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	...	D. Ful	Ful	U	3	U-M	Eat	B	½	6.62	26.5	A*	Eat	Han	53¾	39	3350
Republic 15	...	153°	...	S 34x4	S 34x7	Con J4	4-3¾x5	36.1	L	FP	Pha	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	3	U-M	Eat	I	D	7.20	28.8	B*	Eat	Jac	140¼	82¾	4200
Republic 15W	...	153°	...	S 34x4	S 34x7	Wau V	4-4x5	25.6	L	FP	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	3	U-M	Eat	I	D	7.20	28 8	B*	Eat	Jac	140¼	82¾	4200
Republic 50	...	154°	...	P 30x5	DP30x5	Lyc 4SL	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	6.62	26.5	B*	Eat	Han	135½	79¼	4100
Republic 85	...	155°	...	P 30x5	DP30x5	Lyc C4	4-4x5	25.6	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	½	6.62	26.5	B*	Eat	Han	135½	79¼	4250
Sanford F	...	160°	170	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	Fed	Str	V	D-R	D-R	D. B-L	B-L 20	U	4	Blo	Eat	B	½	6.37	3167	H	Eat	Ros	...	...	4100
*Schacht 30	...	166	193	P 32x6	DP32x6	Wau XL	6-3½x4½	29.4	L	FP	...	Own	Zen	V	L-N	L-N	D. Ful	Ful MGU	U	4	Blo	Wis 670D	R	F	7.75	50.3	G	Shu 510	Ros	142⅝	85 5/16	...
Schacht 20	1850	160	174	P 32x6	DP32x6	Con	6-3⅜x4⅝	27.3	L	FP	Non	You	Zen	O	D-R	D-R	D. B-L	B-L	U	4	Spi	Tim	S	F	5.83	31.19	G	...	Ros	...	...	4500
Selden Unit 35	...	151	181	S 34x4	S 34x5	Con S4	4-4¼x4½	28.9	L	FP	Non	Own	Str	G	D-R	D-R	D. B-L	B-L 31	U	3	Blo	Cla 506	B	½	Opt	...	...	Shu	Ros	144	88¾	4600
Selden Unit 37	...	151	181	P 30x5	DP30x5	Con C15	6-3⅜x4½	27.3	L	FP	Non	Own	Str	G	D-R	D-R	D. Own	Own	U	4	Blo	Cla 506	B	½	Opt	Opt	...	Shu	Ros	168	97	4600
*Service 40Z	3240	168	...	P 36x6	DP36x6	Bud DS6	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 63702	W	F	6.5	34.8	E	Tim 14704H	Han	144	90	4900
Stewart 25	1975	145	172	P 32x6	P 34x7	Lyc 4	4-4x5	25.6	L	FP	Non	Own	Str	G	D-R	D-R	D. Ful	...	U	4	U-P	Tim	S	F	6.83	44.4	G	Tim	Ros	114¾	63¾	3960
Stewart 25X	1975	145	172	P 32x6	P 34x7	Lyc 4SL	6-3¼x4½	25.3	L	FP	Non	Own	Str	G	D-R	D-R	D. Ful	...	U	4	U-P	Tim	S	F	6.83	44.4	G*	Tim	Ros	114¾	63¾	4058
Stewart 25W	2095	145	172	P 32x6	P 34x7	Lyc C4W	4-4x5	25.6	L	FP	Non	Own	Str	G	D-R	D-R	D. Ful	...	U	4	U-P	Tim	W	F	7.33	46.6	G	Tim	Ros	114¾	63¾	4060
Stewart 25XW	2095	145	172	P 32x6	P 34x7	Lyc 4SL	6-3¼x4½	25.3	L	FP	Non	Own	Str	G	D-R	D-R	D. Ful	...	U	4	U-P	Tim	W	F	7.33	46.6	G	Tim	Ros	114¾	63¾	4158
Stewart 26X	2190	165	190	P 32x6	DP32x6	Lyc TF	6-3⅝x5	31.5	L	FP	Han	Fed	Str	V	D-R	D-R	Ful	Ful	U	4	Spi	Tim	S	F	6.83	44.6	G	Tim	Ros	137 3/16	80¼	5000
Stewart 26XW	2290	165	190	P 32x6	DP32x6	Lyc TF	6-3⅝x5	31.5	L	FP	Han	Fed	Str	V	D-R	D-R	Ful	Ful	U	4	Spi	Tim	W	F	7.33	46.0	G	Tim	Ros	137 3/16	80¼	5000
United 32	...	148	...	P 30x5	P 32x6	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Eis	A-L	D. B-L	B-L 31	U	3	Blo	Wis 4600	R	F	6.00	28.8	A*	Shu 310	Ros	115⅝	75⅜	4000
United 32C6	...	148	...	P 30x5	P 32x6	Con 6B	6-3¾x5	33.7	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 35	U	4	Blo	Wis 4600	R	F	6.00	32.1	A*	Shu 310	Ros	106¾	66¾	4200
U. S. 21	2550	144°	162	S 36x4‡	S 36x6‡	Bud WTU	4-3¾x5⅛	22.5	L	PC	Non	Own	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 64600D	W	½	8.75	35.0	*	Shu 510	Lav	120	72	4550
U. S. 20	2650	Opt	192	S 36x4	S 36x7	Bud HS	6-3⅜x4½	27.3	L	PC	...	Own	Str	V	A-L	A-L	D. B-L	B-L 35	U	4	Blo	Tim 64600D	W	½	8.75	46.7	A*	Shu 510	Lav	119	79	4800
Valley	1650	132	142	P 32x6	P 32x6	Her	4-4x5	25.6	...	FP	Non	Har	...	...	D-R	D-R	D. Ful	Ful	U	4	...	Wis	R	...	Opt	Opt	...	Shu	Ros	...	...	...
†Victor 40	2195	148	193½	P 32x6	P 34x7	Her WXB	6-3¾x4½	33.7	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Ful	Ful KU10	U	4	U-M	Wis 4600	S	F	6.1	40.1	G†	Shu 5410	Ros	...	...	4500
*White 56	3125	165°	175	S 36x4‡	S 36x7‡	Own GRC	4-4x5¾	25.6	L	FP	Own	Own	Zen	V	...	L-N‡	P. Own	Own GRBB	U	4	Spi	Own 56	S	½	6.33	26.7	B*	Own 56	Own	119⅜	81⅜	5096
Willys-Knight	...	150	184	P 32x6	P 34x7	Own	6-3⅜x4¾	27.3	X	FP	Han	Own	Til	V	A-L	A-L	P. B&B	Ful DU	U	3	Blo	Eat 1504	B	½	6.25	26.81	E*	Own	Ros	126	73¼	3800
Witt-Will P	...	168°	172	S 36x4	S 36x8	Con S4	4-4¼x4½	28.9	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64600D	W	½	7.10	...	A*	Tim 15300	Ros	136⅛	79⅛	4200
Witt-Will P6	...	Opt	...	P 32x6	DP32x6	Con	...	...	L	PC	Non	Own	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 64660D	W	...	...	...	...	Tim 15300	Ros	136⅛	79⅛	4200
Woods 40B6	...	160	171	P 32x6	P 34x7	Bud HS6A	6-3⅜x4½	27.3	L	PC	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Blo	Tim	S	F	5.20	...	A*	Shu	Ros	128	81	4300
†World D88	...	147½	177½	P 32x6	DP32x6	Lyc	8-2⅞x4¾	26.4	L	PC	Han	Mod	Zen	O	A-L	A-L	P. Lon	Ful	U	4	Blo	Tim	S	F	6.16	37.	F	Shu	Han	118	71	4475
2½ Ton																																
†Acme 52	...	186	...	P 34x7	DP34x7	Con 18R	6-4-4½	38.4	H	PC	Con	Per	Str	V	A-L	A-L	D. B-L	B-L 60	A	4	Blo	Tim 65706DP	W	F	7.75	41.5	B	Tim 15300	Ros	156	96½	7100
Acorn 45	2900	156	...	S 36x4	S 36x8	Con S4	4-4¼x4½	28.9	L	PC	Non	Chi	Zen	G	Bos-R	...	D. Ful	Ful GU14	U	4	Spi	Tim 65600	W	F	Opt	Opt	A	Shu 350	Ros	...	...	4800
Acorn 45P	3600	156	...	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	FP	Non	Chi	Zen	G	A-L	A-L	D. Ful	Ful GJ 14	U	4	Spi	Cla B720	S	½	Opt	Opt	A	Shu 350	Ros	...	...	5500
Am. LaFrance Chief	...	156	...	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	PC	Bud	G&O	Zen	V	D-R	D-R	P. B&B	Ful G7	A	4	Spl	Tim 63-700BX	W	F	5.00	24.0	E*	Tim14703BX	Ros	Opt	Opt	5100
Armleder 50	...	152°	209	S 36x4‡	S 36x8‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L	U	4	Spi	Tim	W	F	9.25	49.5	A*	Tim	Ros	133	77⅜	5300
Armleder 55	...	152	209	S 36x4‡	S 36x8‡	Con K4	4-4⅛x5¼	27.2	L	FP	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L	U	4	Spi	Tim	W	F	9.25	49.5	A*	Tim	Ros	133	77⅜	5300
Armleder 50-6	...	158°	215	S 36x4‡	S 36x8‡	Bud BUS	6-4x5⅛	38.4	L	PC	Mon	Lon	Zen	V	A-L	A-L	D. B-L	B-L	U	4	Spi	Tim	W	F	7.25	38.8	A*	Tim	Ros	133	77⅜	5600
§Atterbury 27R6	...	160	186	P 32x6	DP32x6	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Fed	Zen	V	D-R	A-L	D. B-L	B-L	U	4	Spi	Tim	W	F	6.5	34.7	A*	Tim	Gem	148½	84	5470
Betz D-3	...	168	...	S 36x5	S 36x10	Bud ETU	4-4¼x5½	28.9	L	PC	Mon	Chi	Zen	G	Bos-A	A-L	D. Ful	Ful	U	4	Pet	Tim	W	F	...	...	E	Tim	Ros	...	...	4750
Betz D3-6	...	171	...	S 36x5	S 36x10	Bud DW6	6-3¾x5	33.7	L	PC	Mon	Chi	Zen	G	A-L	A-L	D. Ful	Ful	U	4	Pet	Tim	W	F	...	...	E	Tim	Ros	...	...	5000
Biederman	...	160°	200	S 36x5	S 36x10	Con 6B	6-3¾x5	33.7	L	PC	Han	Own	Zen	G	D-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim	W	F	8.5	45.0	A*	Shu	Ros	164	...	4900
Chicago 25A	...	135	195	S 36x4	S 36x8	Wau V	4-4x5	25.6	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 65000H	W	F	7.75	41.5	G†	Tim 14703H	Ros	Opt	Opt	5555
Chicago 26A	...	...	...	P 34x7	DP34x7	Wau XK	6-3¾x4½	33.7	L	FP	Wau	Chi	Zen	G	Apo	A-L*	D. B-L	B-L 35	U	4	Pet	Tim 65000H	W	F	7.75	41.5	G†	Tim 14703H	Ros	Opt	Opt	5800
Chicago 30B	...	138	222	S 36x5	S 36x10	Wau V	4-4x5	25.6	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 35	U	4	Pet	Tim 65000H	W	F	7.75	41.5	G†	Tim 15733H	Ros	Opt	Opt	6120
Clydesdale 8	...	156°	...	S 36x4	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 35	A	4	Spi	Tim 6566	W	F	8.5	45.48	A*	Tim 15300	Ros	...	...	5300
Coleman C25D	...	109	144	P 38x7	P 38x7	Bud HS6	6-3⅜x4½	27.3	L	FP	Bud	Per	Zen	V	D-R	D-R	D. Ful	Ful GU14	U	8	Spi	Wis	R	F	8.33	159.0	E	Wis	Ros	108	78	6400
•Commerce 50Z	4415	575	...	S 36x5	S 36x10	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706D H	W	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7000
Corbitt 54	...	152	220	S 36x4‡	S 36x8‡	Con K4	4-4⅛x5¼	27.2	L	FP	Sim	Per	Zen	V	Eis	D-R‡	D. B-L	B-L 51	U	4	Spi	Tim 65000D	W	F	8.5	55.1	A‡	Tim 15300	Ros	134	80	5325
•Corbitt 56	...	152	220	P 34x7	DP34x7	Con 16R	6-4x4⅛	38.4	H	FP	Sim	Per	Zen	V	Eis	D-R‡	D. B-L	B-L 51	U	4	Spi	Tim 65000D	W	F	7.25	45.5	A‡	Tim 15300	Ros	134	80	5400
Denby 43	...	155	...	S 36x4	S 36x8	Her O	4-4x5	25.6	L	PC	...	Lon	Zen	G	Eis	...	D. Ful	Ful	U	4	U-P	Cla	I	D	9.00	39.12	...	Con	Ros	...	...	4925
•Diamond T550	2195	165°	183¼	P 32x6	DP32x6	Her WXC	6-4x4½	38.4	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Cla	S	½	7.12	36.9	G†‡	Cla	Ros	...	...	5400
•Diamond T502	...	173°	188	S 34x5	S 34x8	Her WXC	6-4x4½	38.4	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	Cov	U	4	Spi	Tim	W	F	9.33	48.5	G†‡	Shu	Ros	...	...	5800

Key of abbreviations, page 78

Trade Name and Model	General: Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Engine: Make and Model	Engine: Number of Cylinders Bore and Stroke	Engine: N.A.C.C. Rated H.P.	Engine: Valve Arrangement	Engine: Oiling System	Engine: Governor (Make)	Engine: Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Electrical System: Ignition System (Make)	Electrical System: Generator and Starter (Make)	Clutch: Type and Make	Gearset: Make and Model	Gearset: Location	Gearset: No. of Forward Speeds	Universals (Make)	Rear Axle: Make and Model	Rear Axle: Final Drive	Rear Axle: Type	Gear Ratios: Total Reduction in High	Gear Ratios: Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase: Cab to rear of frame	Standard Wheelbase: Cab to rear axle	Chassis Weight (lbs.) (stripped)
2½ Ton—Cont'd																																
Fageol 250	2990	178°	196	P 32x6	DP32x6	Wau XK	6-3¾x4½	33.7	L	PC	Non	Own	Zen	V	Bos-R	Bos-R	D. B-L	B-L 35	U	4	Spi	Tim 63500	W	F	4.88	20.56	G†	Tim 14703	Ros	167⅛	99⅛	5250
Federal T3W	....	148	185	P 32x6	DP32x6	Wau V	4-4x5	25.6	L	PC	Wau	Lon	Zen	V	D-R	D-R	P. B&B	Own	A	4	Opt	Tim 64600HP	W	½	7.25	36.2	G	Own	Ros	119	71	5000
Federal T7W	....	148	185	P 32x6	DP32x6	Con 16C	6-3⅝x4⅝	27.3	L	PC	Non	Lon	Zen	V	D-R	D-R	P. B&B	Own	A	4	Opt	Tim 64600HP	W	½	7.25	30.00	G	Own	Ros	119	71	5000
Fisher Heavy Duty	....	155	190	P 32x6	DP32x6	Con 6B	6-3¾x5	33.7	L	FP	.....	Lon	Str	V	D-R	D-R	D. Ful	Ful GU14	U	4	Spi	Eat 2254	B	F	5.7	26.95	A*	Shu 550	Ros	120	30¾	4800
Fisher Heavy Duty	....	155	190	S 36x5	S 36x8	Con 6B	6-3¾x5	33.7	L	FP	.....	Lon	Str	V	D-R	D-R	D. Ful	Ful GU 14	U	4	Spi	Tim 65600SP	W	F	8.50	40.8	A*	Tim 15300	Ros	120	30¾	5150
*Garford 50Z	4415	175	.....	S 36x5	S 36x10	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7000
Gotfredson W44	....	165	196	P 34x7	P 34x7	Bud KBU-I	4-4x5¼	25.6	L	PC	Non	MeC	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 63721H	W	F	7.66	40.98	G	Tim 14703H	Ros	.....	.....	5050
Gotfredson W46	....	165	196	P 34x7	P 34x7	Bud DW6	6-3¾x5	33.7	L	PC	Pie	MeC	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Tim 63721H	W	F	6.5	34.78	G	Tim 14703H	Ros	.....	.....	5000
*G-P 57-4	....	154	175	P 36x6	P 40x8	Wau CR	4-4¾x5¾	30.6	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 51	U	5	M.M.	Tim 65706	W	F	7.80	.....	F*	Tim 15733	Ros	.....	.....	6800
*G-P 57-6	....	154	175	P 36x6	P 40x8	Wau 6-KS	6-4x4¾	38.4	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 51	U	5	M.M.	Tim 65706	W	F	7.80	.....	F*	Tim 15733	Ros	.....	.....	6800
Gramm 564N	2985	150°	196	P 32x6	DP32x6	Lyc TS	6-3⅞x5	36.2	L	PC	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful G	U	4	Blo	Wis 6617B	R	F	6.33	30.4	A*	Col 5400	Ros	97	57⅜	4800
Gramm-Bernstein 125	....	144°	160	S 36x4‡	DS36x4	Con S4	4-4¼x4½	28.9	L	FP	Non	Own	Str	G	Eis	A-L	D. Ful	Ful GU	U	4	Own	Wis	W	F	8.66	41.57	*	Shu 5410	Ros	125	76¼	5440
Gramm Bernstein B6	....	144	.....	P 32x6	DP32x6	Con 16C	6-3⅜x4⅝	27.3	L	PC	Non	You	Zen	V	A-L	A-L	D. Ful	Ful KU10	U	4	Blo	Tim	B	F	5.83	37.89	G†	Tim	Ros	120½	73¾	4590
*Gramm-Bernstein C	....	144°	166	S 36x4‡	DS36x4‡	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Own	Str	V	Eis	A-L	D. Ful	Ful GOG	A	8	Blo	Wis 9890T	W	F	8.66	76.6	B*	Shu 5550	Ros	128½	76½	5865
Gramm-Bernstein C6	....	150°	201	S 36x4‡	DS36x4‡	Con 6B	6-3¾x5	33.7	L	FP	Pie	Own	Str	V	Eis	A-L	D. Ful	Ful GOG	A	8	Blo	Wis 9890T	W	F	7.75	68.6	B*	Shu 5550	Ros	128½	77⅛	5920
Guilder D6	2650	160	.....	P 32x6	DP32x6	Bud HS6	6-3⅜x4½	27.3	L	PC	Non	G&O	Zen	V	D-R	D-R	D. B-L	B-L 31	U	3	Spi	Wis 471	R	F	7.26	33.6	A*	Shu 5410	Ros	.....	.....	3600
Hahn 56	....	160	199	P 32x6	DP32x6	Con 6B	6-3¾x5	33.7	L	PC	Han	Chi	Zen	V	D-R	D-R	D. B-L	B-L 51	U	4	Spi	Eat 2252	S	F	6.13	32.74	B	Shu 5550	Ros	128	78	5300
Hahn 54	....	153	192	P 36x4	P 36x8	Her L	4-4½x5¾	32.4	L	PC	Han	Chi	Zen	V	Bos-R	Non	D. B-L	B-L 51	U	4	Spi	Tim 65600D	W	F	7.25	38.7	A	Tim 15302	Ros	128	76	5600
Harvey WG6	3500	185	185	S 36x5‡	S 36x10‡	Bud DW6	6-3¾x5	33.7	L	PC	MeC	Own	Str	G	A-L	A-L	D. B-L	B-L 55	A	7	Spi	Tim 65700D	W	F	9.33	88.6	A*	Tim 15300	Ros	.....	.....	6900
Harvey WG	3500	150°	185	S 36x5‡	S 36x10‡	Bud EBUI	4-4¼x5½	28.9	L	PC	MeC	Own	Str	G	Bos-R	Non	D. B-L	B-L 55	A	7	Spi	Tim 65700	W	F	9.33	88.6	A*	Tim 15300	Ros	.....	.....	6950
Hawkeye 50-75	....	210°	225	S 36x5‡	S 36x8‡	Bud BA6	6-4½x5½	40.8	L	PC	Non	Per	Zen	G	Bos-R	N-E	D. Ful	Ful HU	U	4	Pie	Wis 1418	R	F	6.86	37.4	A‡	Shu 5550	Ros	205	131	5600
Hawkeye 50-48	....	Opt	185	S 36x5‡	S 36x8	Bud EBUI	4-4¼x5½	28.9	L	PC	Sim	Per	Zen	G	Bos-R	N-E	D. Ful	Ful HU	U	4	Pie	Wis 8800A	R	F	8.6	54.2	A*	Shu 5550	Ros	179	106	5400
Hawkeye 50-60	....	197	197	S 36x6	DS38x7	Bud DW6	6-3¾x5	33.7	L	PC	.....	Per	Zen	G	N-E	N-E	D. Ful	Ful HU	U	4	Pie	Wis 1418	R	F	8.00	50.2	A‡	Shu 5550	Ros	179	118	5800
Hendrickson ST	3400	.....	.....	S 36x5	S 36x8	Bud ETU	4-4¼x5½	28.9	L	FP	MeC	Chi	Zen	G	Spl	.....	D. Ful	Ful G7	A	4	Pie	Tim 65600D	W	F	.....	.....	A*	Tim 15300B	Ros	Opt	Opt	5750
*Hug 26	....	150	195	P 32x6	DP32x6	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	A-L	D-R	D. B-L	B-L 51	U	4	Blo	Wis 4610	R	F	7.26	23.88	A	Shu 550	Ros	130	75	5645
*Hug 81	....	127	127	P 36x6	DP36x6	Bud KBU-I	4-4x5¼	25.6	L	PC	Bud	You	Zen	V	Eis	D-R	D. B-L	B-L 51	U	4	Blo	Wis 8800B	R	F	7.85	42.05	A	Shu 550	Ros	78	57⅛	5850
*Hug 84	....	127	127	P 36x6	DP36x6	Bud KBU-I	4-4x5¼	25.6	L	PC	Bud	You	Zen	V	Eis	D-R	D. B-L	B-L 51	U	5	Blo	Wis 8800B	R	F	7.85	46.85	A	Shu 550	Ros	78	57⅛	6088
Indiana 115A	....	132	132	P 32x6	DP34x7	Her OX	4-4x5	25.6	L	PC	Non	Lon	Str	G	Eis	A-L	P. B&B	B-L 35	U	4	Spi	Cla 720	S	½	7.85	42.99	B*	Shu 5410	Ros	87½	56¾	4970
Indiana 615A	....	136	135⅛	P 32x6	DP34x7	Wis Y	6-3⅜x5	27.3	H	PC	K.P.	Lon	Str	G	Eis	A-L	P. B&B	B-L 35	U	4	Spi	Cla 720	S	½	7.85	46.79	B*	Shu 5410	Ros	87½	57⅛	5160
Int. Harvester HS54	....	148°	200	S 36x8‡	S 36x8‡	Ha S 151	4-4¼x5½	28.9	H	PC	Ha S	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 54-65000	R	F	6.85	60.49	E*	Eat 54F	Own	106½	73¼	7500
Int. Harvester HS54C	....	148°	200	S 36x5‡	S 36x10‡	Ha S 151	4-4¼x5½	28.9	H	PC	Ha S	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	7.22	63.75	E*	Eat 54F	Own	106½	73¼	8165
Int. Harvester 54C	....	140°	185	S 36x5‡	S 36x10‡	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own	C	D	8.75	51.5	B*	Own	Own	104	67	6400
Int. Harvester 54	....	140°	185	S 36x5‡	S 36x8‡	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Eat 54-65000	R	F	9.1	54.0	B*	Own	Own	116	67	6345
*Kenworth DH	3130	166	180	P 32x6	DP32x6	Her WXC	6-4x4½	38.4	L	PC	Pie	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Cla B721	B	½	7.00	42.8	A	Cle F304	Ros	130	84	.....
King Zeitler 45	....	156°	.....	S 36x5‡	S 36x8‡	Con S4	4-4¼x4½	28.9	L	FP	Han	Chi	Str	G	Bos-R	A-L‡	D. B-L	B-L 35	A	4	Blo	Tim 65000D	W	F	9.25	49.5	A*	Tim 15302	Ros	.....	.....	5400
Kissel	....	168	.....	S 36x4	S 36x8‡	Own 50000	4-4¼x5½	28.9	L	SP	Pie	MeC	Str	V	Eis	D-R‡	D. W-G	Ful G7	A	4	Spi	Tim 6566	W	F	8.50	40.8	A*	Tim 1544B	Ros	.....	.....	5100
Kleiber Speed	2950	180	180	P 32x6	DP32x6	Bud	6-3¾x5	33.7	L	PC	Non	Own	Str	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 63720H	W	F	6.25	33.4	A†	Tim 14703H	Ros	144	97	5100
Kleiber	3850	163	165½	S 36x5‡	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	V	Bos-R	Bos A‡	D. B-L	B-L 51	A	4	Spi	Tim 65660D	W	F	7.75	41.5	A†	Tim 1544B	Ros	156	90	6500
*Larrabee 50	....	177	200	P 32x6	P 32x6	Con 16R	6-4x4⅛	38.4	H	PC	Non	Per	Zen	G	D-R	D-R	D. B-L	B-L	U	4	Spi	Wis	R	F	Opt	Opt	E†	Tim	Ros	.....	.....	.....
LeMoon HB25	2900	166	182	S 34x5	S 34x8	Wau 6XK	6-3¾x4½	33.7	...	FP	Non	Chi	Str	G	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	8.5	45.47	G	Tim 15733H	Ros	138	90	5500
Le Moon HB26	3250	166	182	P34x7	DP34x7	Wau 6XK	6-3¾x4½	33.7	...	FP	Non	Chi	Str	G	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	7.25	38.78	G	Tim 15733H	Ros	138	90	5500
Le Moon HB27	3600	166	182	P 34x7	DP34x7	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim 65000H	W	F	6.00	32.10	G	Tim 15733H	Ros	138	90	5700
Luedinghaus	....	145°	172	S 36x5‡	S 36x8‡	Wau FU	4-4x5¾	25.6	L	PC	Wau	Own	Zen	...	Eis	Non	D. Ful	Ful GU14	U	4	Spi	Tim 65000D	W	F	.....	.....	A*	Shu 510	Ros	120	77	4800
Maccar 46	....	150	180	P 32x6	DP32x6	Wis Y	6-3⅜x5	27.3	L	PC	Han	Lon	Str	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Wis 6600	R	F	6.92	37.4	A‡	Shu 5410	Ros	131¼	81¼	5200
Mack AB	3400	146½°	.....	S 36x4	DS36x4	Own AB	4-4½x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*8.87	43.0*	B*	Own AB	Own	.....	.....	.....
Mack AB	3850	164½°	.....	S 36x4	DS36x4	Own AB	4-4½x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	A	4	Spi	Own AB	R	F	*9.25	44.9*	B*	Own AB	Own	.....	.....	.....
Master 41A	....	154°	.....	S 36x5	S 36x10	Bud ETU	4-4¼x5½	28.9	...	FP	.....	.....	Zen	...	Eis	.....	D. Ful	Ful G	A	4	Spi	Tim 6566	W	F	.....	.....	A‡	Tim	Ros	.....	.....	6250
Master 45	....	154°	.....	S 36x5	S 36x10	Jackson	4-4¼x6⅜	28.9	...	FP	.....	.....	Str	...	Spl	.....	D. Ful	Ful G	A	10	Spi	Tim 65600	W	F	.....	.....	A‡	Tim	Ros	.....	.....	.....
Menominee HX6	....	155°	182	P 34x7	P 36x8	Wau 6XK	6-3¾x4½	33.7	L	FP	Wau	Per	Zen	V	A-L	A-L	P. B&B	Cot AU	U	4	Pie	Wis 6600	R	F	6.33	31.8	A	Shu 550	Ros	120	68	5950
Noble 156	....	176	.....	P 32x6	DP32x6	Bud DW6	6-3¾x5	33.7	L	PC	.....	Chi	Str	V	A-L	A-L	D. Ful	Ful	U	4	Blo	Tim 65000BX	W	F	6.25	32.4	B	Tim 14703BX	Ros	147½	80½	5300
*Oneida C9	....	160	.....	P 34x7	P 36x8	Wau CR	4-4⅜x5¾	30.6	L	PS	Non	Mod	Str	V	A-L	A-L	Ful	Ful GCL	A	4	Pet	Tim 65660	W	F	8.5	.....	.....	Shu 550	Ros	.....	.....	5200
*Relay 50C	4415	175	.....	P 36x6	S 36x10	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Own 60	R	F	7.88	58.5	E	Tim 15733H	Ros	156	97½	7300
Republic 60	....	163°	.....	P 32x6	DP32x6	Lyc TF	6-3⅝x5	31.5	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¼	5.5	22.0	E*	Eat	Han	147¾	84	4400
Republic 58	....	122	.....	P 32x6	DP32x6	Lyc C4	4-4x5	25.6	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¼	6.87	27.5	B*	Eat	Han	83	46½	4300
Republic 58-6	....	122	.....	P 32x6	DP32x6	Lyc 4SG	6-3¼x4½	25.3	L	PC	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	3	U-M	Eat	B	¼	6.87	27.5	B*	Eat	Han	83	46½	4300
*Senecht 40	....	166	193	S 34x5	DS34x5	Wau XK	6-3¾x4½	33.7	L	PC	Han	Own	Zen	G	L-N	L-N	D. Ful	Ful MGU	U	4	Spi	Wis	R	F	7.75	50.3	G	Shu	Ros	142⅝	85⅛	6200
*Service 50Z	4415	175	.....	S 36x5	S 36x10	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7000
Standard 2½-3½K	....	147°	170	S 36x5‡	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Sim	Lon	Str	G	Eis	Bos A‡	B. B-L	B-L 35	A	4	Spi	Tim 65600SP	W	F	8.50	45.4	A*	Tim 15300	Ros	132	83	5400
Standard 2½-3½ KS	....	147°	170	S 36x5‡	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Sim	Lon	Str	G	Eis	Bos A‡	D. B-L	B-L 55	A	4	Spi	Tim 65600SP	W	F	9.25	49.4	A*	Tim 15300	Ros	132	83	5488
Stewart 18X	2690	165	190	S 32x6	DS32x6	Lyc TF	6-3⅝x5	31.5	L	FP	Pie	Own	Str	V	D-R	D-R	D. Ful	Ful	U	4	U-P	Tim	W	F	7.25	47.5	G*	Tim	Ros	137⅞	80¼	5500
Studebaker 77	2585	158	.....	B 32x6.75	B32x6.75	Own	8-3½x4⅜	39.2	L	PC	Non	Lon	Sto	G	D-R	D-R	D. Lon	Ful	U	3	Spi	Eat	S	½	5.11	19.8	G*	Eat	Ros	.....	.....	.....
*United 50	....	153	.....	S 34x4	S 34x8	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Eis	A-L	D. B-L	B-L 35	U	4	Blo	Wis 6600	R	F	7.75	41.5	A*	Shu 510	Ros	132⅝	80⅛	4800
*United 50C6	....	153½	.....	S 34x4	S 34x8	Con 6B	6-3¾x5	33.7	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 35	U	4	Blo	Wis 6600	R	F	7.75	41.5	A*	Shu 510	Ros	123⅜	72¼	5000
Valley	2395	150	165	P 32x6	P 32x6	Her	4-4x5	25.6	...	FP	Non	Chi	.....	...	D-R	D-R	D. Ful	Ful	U	3	.....	Wis	R	...	Opt	Opt	...	Shu	Ros'	.....	.....	.....
Valley	2495	150	165	P 32x6	P 32x6	Her	4-4x5	25.6	...	FP	Non	Chi	.....	...	D-R	D-R	D. Ful	Ful	U	4	.....	Wis	R	...	Opt	Opt	...	Shu	Ros	.....	.....	.....
†Victor 45	2495	148	193½	P 32x6	DP32x6	Her WXB	6-3x3¾	33.7	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Ful	Ful KU10	U	4	U-M	Wis 4600	S	F	6.1	40.1	G†	Shu 5410	Ros	.....	.....	4700
Wachusett L	....	170	170	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Non	G&O	Zen	V	Bos-A	Bos-A	D.B-L	B-L 55	U	4	Spi	Tim 6560	W	F	7.75	41.5	*	Tim 1542	Ros	144	102	5200
Ward La France 2D	....	Opt	.....	S 34x4	DS34x4‡	Wau V	4-4x5	25.6	L	PC	Wau	Own	Zen	V	Apo	A-L*	D. B-L	B-L 35	U	4	M.M.	Tim 65600D	W	F	6.5	34.7	A	Shu	Ros	.....	.....	5100

White 51A	3750	170°	190	S 36x5‡	S 36x8‡	Own GRB-I	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	......	L-N‡	P. Own	Own GRBA	U	4	Spi	Own 51A	S	½	7.14	35.6	B*	Own	Own	145⅞	84⅝	6256
Willys Knight 25	....	150	184	P 32x6	DP32x6	Own	6-3⅜x4¾	27.3	X	FP	Han	Own	Til	V	A-L	A-L	P. B&B	Ful GU	U	4	Blo	Wis 6617B	R	F	6.33	30.38	E*	Col	Ros	126	73¼	4920
Witt-Will S	....	146	172	S 36x4‡	S 36x10	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65600D	W	F	8.25	40.0	A*	Tim 15300	Ros	136⅛	79⅛	5300
Witt-Will S6	....	Opt	.....	P 32x6	DP32x6	Con R18	6-4x4¼	38.4	L	PC	......	......	Zen	V	D-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65600D	W	F	....	....	...	Tim 15300	Ros	....	....	....
Woods 51W4	....	160	172	S 36x5	S 36x10‡	Bud KBU-I	4-4x5¼	25.6	L	PC	Non	Own	Zen	V	Bos-A	......	D. B-L	B-L 55	A	7	The	Tim 65600D	W	F	8.5	80.7	A*	Shu	Ros	138	85	5700
†World D-88	....	164	178	P 34x7	DP34x7	Lyc	8-2⅞x4¾	26.4	L	PC	Han	Mod	Zen	O	A-L	A-L	P. Lon	Ful	U	4	Blo	Tim	S	F	7.8	46.8	F	Shu	Han	142	87½	5560
3 Ton																																
†Acme 64	....	180½	.....	P 36x8	DP36x8	Con L4	4-4½x5½	32.4	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 60	A	4	Blo	Tim 65706DP	W	F	8.5	45.5	B	Tim 15300	Ros	156	96½	7100
†Acme 66	....	186	.....	P 36x8	DP36x8	Con 20R	6-4⅛x4¾	40.8	H	PC	Con	Per	Str	V	A-L	A-L	D. B-L	B-L 60	A	4	Blo	Tim 65706DP	W	F	7.75	41.5	B	Tim 15300	Ros	156	96½	7400
Acorn 50	3250	156	.....	S 36x5	S 36x10	Bud ETU	4-4¼x5½	28.9	L	PC	McC	Chi	Zen	G	Bos-R	......	D. B-L	B-L 51	U	4	Spi	Tim 65700	W	F	Opt	Opt	A	Tim 15300	Ros	.....	.....	5500
Acorn 50P	4000	156	.....	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	FP	McC	Chi	Zen	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim 65700	W	F	Opt	Opt	A	Tim 15300	Ros	.....	.....	5700
Amer.-La France W	5950	Opt	201¾	S 36x5	S 36x10	Own 2R	[illegible]-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	10.66	40.6	B*	Own 2R	.....	132	81⅛	6600
Armleder 60	....	152°	209	S 36x5‡	S 36x10‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim	W	F	8.5	56.2	A*	Tim	Ros	133	77⅜	5800
Armleder 60-6	....	158°	215	S 36x5‡	S 36x10‡	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim	W	F	7.2	45.5	A*	Tim	Ros	133	77⅜	6100
Atterbury 27C6	....	168	200	P 34x7	DP34x7	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Fed	Zen	V	D-R	A-L	D. B-L	B-L	U	4	Spi	Tim	W	F	7.57	38.7	A*	Tim	Gem	168	96	5850
Atterbury 22C	....	156°	180	S 36x4‡	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Fed	Zen	V	Bos-A	A-L	D. B-L	B-L	A	4	Spi	Tim	W	F	9.25	49.4	A*	Tim	Gem	129¼	78¾	5925
Autocar H*	3750	114	203	P 34x5	P 36x10	Own	4-4½x5½	32.4	L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	7.72	47.84	B	Own J	Ros	131½	76	5800
Autocar SH*	4000	114	203	P 34x5	P 36x5	Own	6-4⅛x4¾	40.8	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	7.72	47.84	B	Own J	Ros	131½	76	5800
Autocar T	5000	187	213	P 36x8	DP36x10	Own	6-4⅜x4¾	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own T	R	F	6.43	40.76	B	Own J	Ros	175¼	104¾	7100
Brockway K	....	154⅛°	189⅜	S 36x5‡	S 36x10‡	Con K4	4-4⅛x5¼	27.2	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 35	A	4	Spi	Tim 65704S	W	F	7.75	41.4	B*	Tim 15300	Ros	152	93⅝	5855
*Brockway KW	....	170°	220	P 34x7	DP34x7	Wis H	6-4x5	38.4	H	PC	K.P.	G&O	Zen	V	L-N	L-N	D. B-L	B-L 51	U	4	Spi	Wis 69310	R	F	6.3	33.7	B‡	Shu 5550B	Ros	141⅜	86⅜	6920
Brockway KR	....	160⅝°	195⅞	S 36x5‡	S 36x10‡	Con L4	4-4½x5½	32.4	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 55	A	4	Spi	Tim 65704S	W	F	6.75	36.1	B*	Tim 15300	Ros	156	94½	6290
*Chicago 31B	....	159	231	S 36x5	S 36x10	Wau CU	4-4⅜x5¾	30.6	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 55 Max	A	7	Pet	Tim 65706DH	W	F	8.5	80.75	B†	Tim 16310	Ros	Opt	Opt	6970
*Chicago 32B	....	164½	236	P 36x8	DP36x8	Wau KU	6-4¼x4¾	43.3	L	FP	Wau	Chi	Zen	G	Apo	A-L*	D. B-L	B-L 55 Max	A	7	Pet	Tim 65706DH	W	F	8.5	80.75	B†	Tim 16310	Ros	Opt	Opt	7240
Clinton 55-6	....	168	Opt	P 32x6	DP32x6	Bud DW-6	6-3¾x5	33.7	L	FP	Non	Per	Zen	V	Spl	D-R	D. B-L	B-L 35	U	4	Blo	Cla B720	B	½	7.1	29.4	A*	Shu 5430	Ros	Opt	Opt	5200
Clinton 65	....	184	Opt	S 34x5‡	DS34x5‡	Bud ETU	4-4¼x5½	28.9	L	PC	Bud	Per	Zen	V	Spl	D-R	D. B-L	B-L 55	A	4	Blo	Tim 65600D	W	F	8.50	45.5	A	Tim 15302	Ros	Opt	Opt	5925
*Clinton 65-6	....	150	.....	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	FP	Non	Per	Zen	V	Spl	D-R	D. B-L	B-L 55	U	4	Blo	Tim65706DHP	W	F	Opt	Opt	B†	Tim 15302	Ros	98¾	.....	.....
Clydesdale 6	....	163°	.....	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 51	A	4	Spi	Tim 6566	W	F	9.25	49.4	A*	Tim 1544B	Ros	.....	.....	5850
Clydesdale 6X	....	163°	.....	S 36x4	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 51	A	4	Spi	Tim 6566	W	F	9.25	49.4	A*	Tim 15300	Ros	.....	.....	5700
Coleman D-40	....	130	180	P 40x8	P 40x8	Bud DW6	6-3¾x5	33.7	L	FP	Non	Per	Str	V	D-R	D-R	D. Ful	Ful RU16	U	8	Spi	Wis	R	F	8.33	159.00	E*	Wis	Ros	144	89	6800
*Commerce 60Z	4480	175	.....	S 36x5	S 36x12	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15337H	Ros	156	97½	7100
Corbitt 64	....	165	220	S 36x4‡	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Sim	Per	Zen	V	Eis	D-R‡	D. B-L	B-L 55	U	4	Spi	Tim 55700D	W	F	9.25	55.1	A‡	Tim 15300	Ros	164	94	6160
Corbitt 66	....	165	220	P 34x7	DP34x7	Con 18R	6-4x4¼	38.4	H	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65700D	W	F	7.75	73.6	A‡	Tim 15300	Ros	164	94	6800
Day-Elder JF	....	180	204	P 36x6	DP36x6	Bud DW6	6-3¾x5	33.7	L	PC	Bud	Bus	Zen	V	D-R	D-R	D. Ful	Ful GU12	U	4	Spi	Tim 65000H	W	F	7.75	37.2	A	Tim 15733H	Ros	163	91	6500
*Diamond T-U5GSP	....	162½	224	P 36x8	DP36x8	Her YXC	6-4⅜x4¾	45.9	L	PC	Han	G&O	Zen	G	......	A-L	D. Cov	B-L	A	7	Spi	Tim	W	F	8.5	44.2	A*	Tim	Ros	.....	.....	7400
Dixon	4200	156	.....	S 36x5	S 36x10	Her G	4-4¾x5¾	36.1	L	PS	Pie	G&O	Zen	V	Eis	D-R	D. Ful	Ful HU	U	4	Spi	Tim 65700D	W	F	7.75	44.0	A	Shu 610	Ros	.....	.....	6100
*Dodge Brothers GE	1805	135	135	P 34x7	P 36x8	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	82¼	54¾	4145
*Dodge Brothers GES	1870	135	135	P 34x7	DP34x7	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	82¼	54¾	4345
*Dodge Brothers GEX	1745	135	135	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	82¼	54¾	4225
*Dodge Brothers RE	1835	165	165	P 34x7	P 36x8	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	132¾	84¾	4440
*Dodge Brothers RES	1900	165	165	P 34x7	DP34x7	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	132¾	84¾	4640
*Dodge Brothers REX	1775	165	165	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	132¾	84⅜	4520
*Dodge Brothers HE	1905	185	185	P 34x7	P 36x8	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	164¾	104¾	4460
*Dodge Brothers HES	1970	185	185	P 34x7	DP34x7	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	164¾	104¾	4660
*Dodge Brothers HEX	1845	185	185	P 32x6	DP32x6	Own	6-3⅜x4½	27.3	L	PC	K. P.	Fed	Zen	V	N-E	N-E	P. B&B	Own	U	4	U-P	Own	S	½	7.13	46.31	G†	Own	Han	164¾	104¾	4540
Double Drive TT	4000	144	148	S 36x6‡	S 36x6‡	Bud ETU	4-4¼x5½	28.9	L	PC	Pie	Lon	Zen	V	Spl	Opt	D. Det	Own D. T. P.	A	4	Own	Own D.T.P.	W	½	8.50	39.5	B*	Own FTT	Ros	100	64	6250
*Douglas	....	156°	.....	S 36x5‡	S 36x10‡	Bud YBU-I	4-4½x6	32.4	L	PC	Opt	Own	Zen	V	Bos-R	Opt	D.Ful	Ful RU-16	U	4	Blo	Wis 8800A	R	F	7.25	34.8	A‡	Shu 5550	Ros	168	98	6500
*Douglas	....	186	.....	P 36x6	DP38x7	Bud BUS	6-4x5⅛	38.4	L	PC	Opt	Own	Zen	V	Bos-R	Opt	D. Ful	Ful RU-16	U	4	Blo	Wis 8800A	R	F	7.25	59.6	A‡	Shu 5550	Ros	168	98	6800
*Douglas Spl	....	210	.....	P 38x7	DP40x8	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Opt	Own	Zen	V	L-N	L-N	D. Ful	Ful H-OG	A	7	Blo	Wis 1400	R	F	7.85	84.0	A‡	Shu 5550	Ros	204	120	7560
Duplex FAC	....	166	.....	S 34x5	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PS	Non	Mod	Zen	V	Eis	A-L	D. B-L	B-L 35	U	4	Pet	Tim 65700	W	F	8.5	45.5	A*	Shu 5550	Ros	.....	.....	7200
Duplex SAC	....	166	.....	S 34x5	S 36x8	Bud BA6	6-4⅛x5⅛	40.8	L	FP	Non	Mod	Zen	V	A-L	A-L	D. B-L	B-L 55	A	7	Pet	Tim 65704	W	F	8.5	81.0	A*	Shu 5550	Ros	.....	.....	7400
Fageol 340	4450	182°	200	P 36x6	DP36x6	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55 & 60	U&A	7	Spi	Tim 65700	W	F	5.19	93.31	A	Tim 15302	Ros	172 1/16	101⅝	7820
Fageol 365	3900	182	200	P 36x6	DP36x6	Wau KS	6-4x4¾	38.4	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65000H	W	...	7.75	41.46	A†	Tim 15723H	Ros	172 1/16	101⅝	7250
Fageol 370	4800	182°	200	P 36x6	DP36x6	Wau KU	6-4¼x4¾	43.3	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55 & 60	U&A	7	Spi	Tim 65700	W	F	5.19	93.31	B‡	Tim 15302	Ros	172 1/16	101⅝	8080
*Federal U5	....	158	194	S 36x4‡	S 36x8	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Opt	Tim 65600SP	W	F	8.5	80.75	B	Own	Gem	131	85¾	5800
F.W.D.B	4200	124°	156	S 36x6	S 36x6	Own A	4-4¾x5½	36.1	T	PC	Pie	McC	Str	G	Eis	N-E	O-H-S	Cot DAF	A	3	Own	Own B	B	F	8.9	35.6	B	Own B	Ros	130	93	6460
Freeman	....	186	.....	P 36x7	DP36x7	Bud DW6	6-3¾x5	33.7	...	FP	......	Lon	Str	...	Bos-R	Bos-R	D. Ful	Ful HU16	U	4	......	......	B	...	...	...	E	......	Woh	.....	.....	.....
*Garford 60Z	4480	175	.....	S 36x5	S 36x12	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7100
General Motors T60	2800	140°	200	P 36x6	P 36x6	Buick	6-3⅝x5	31.5	I	PC	Han	Lon	Mar	P	D-R	D-R	......	Own	U	4	Spi	Tim 65706N	W	F	7.25	44.77	E*	Ent 526F	Jac	.....	.....	5873
*Gotfredson W54	....	163	194 5/16	S 36x4	S 36x8	Bud EBUI	4-4¼x5½	28.9	L	PC	Pie	McC	Zen	V	Bos-R	D-R	D. B-L	B-L 51	U	5	Spi	Tim 65000HP	W	F	7.75	46.19	G	Tim 15730H	Ros	.....	.....	5700
*Gotfredson W56	....	165	196	S 36x4	S 36x8	Bud DW6	6-3¾x5	33.7	L	PC	Pie	McC	Zen	V	D-R	D-R	D. B-L	B-L 51	U	5	Spi	Tim 65000HP	W	F	7.0	41.72	G	Tim 15730H	Ros	.....	.....	5500
*G-P 52-6	....	167	208	P 34x7	P 36x8	Lyc TS	6-3⅞x5	36.2	L	FP	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 51	U	5	M.M.	Tim 58000	S	F	7.8	41.2	G†	Tim 15733H	Ros	.....	.....	5200
G-P 52-4	....	167	208	P 34x7	P 36x8	Lyc C4	4-4x5	25.6	L	FP	Non	Chi	Str	V	A-L	A-L	D. B-L	B-L 51	U	4	M.M.	Tim 58000	S	F	7.8	41.2	G†	Tim 14703H	Ros	.....	.....	5200
Gramm 35	4160	153°	200	S 36x5‡	S 36x10‡	Her L	4-4½x5¾	32.4	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 35	4160	153°	200	S 36x5‡	S 36x10‡	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 38 low bed	4160	153°	200	S 36x5‡	S 36x10‡	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful GU	U	4	Blo	Wis 67317	R	F	6.9	33.1	B*	Shu 5550B	Ros	138	83¾	7100
Gramm-Bernstein 30	....	150	168	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful G7	A	8	Own	She	W	½	7.75	63.7	B*	She	Ros	130	81¾	6500
Gramm-Bernstein C	....	144°	166	S 36x4‡	DS36x4‡	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Own	Str	V	Eis	A-L	D. Ful	Ful GOG	A	8	Blo	Wis 9890T	W	F	8.66	76.6	B*	Shu 5550	Ros	128½	76 11/16	5865
Gramm-Bernstein C6	....	150°	201	S 36x4‡	DS36x4‡	Con 6B	6-3¾x5	33.7	L	FP	Pie	Own	Str	V	Eis	A-L	D. Ful	Ful GOG	A	8	Blo	Wis 9890T	W	F	7.75	68.6	B*	Shu 5550	Ros	128½	77 1/16	5920
Guilder H	3750	160	.....	S 36x5	DS36x5‡	Bud EBU-I	4-4¼x5½	28.9	L	PC	Pie	G&O	Zen	G	Eis	Bos-A	D. B-L	B-L 51	U	4	Spi	Wis 88EF	W	F	7.75	42.0	...	Shu 5550	Ros	...	...	5600
Guilder E6	3350	160	.....	P 32x6	S 36x10	Bud DW6	6-3¾x5	33.7	L	PC	Non	G&O	Zen	V	D-R	D-R	D. B-L	B-L 51	U	4	Spi	Wis 660	R	F	7.75	41.46	..	Shu 5550	Ros			4900
Hahn L	....	146°	192	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Pha	Chi	Str	G	Bos-R	D-R	D. B-L	B-L	U	4	Spl	Tim 6570D	W	F	8.5	......	A	Tim 1544	Ros	164	94	5900
Hendrickson T	3600	Opt	Opt	S 36x5	S 36x10	Bud EBU-I	4-4¼x5½	28.9	L	FP	McC	Chi	Zen	G	Spl	Opt	D. Ful	Ful G7	A	4	Spi	Tim 65700D	W	F	Opt	Opt	A*	Tim 15300B	Ros	Opt	Opt	6350
*Hug 40	....	150°	195	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	A-L	D-R	D. Ful	Ful GOG	A	8	Blo	Cla B720	S	½	7.00	61.95	A	Shu 550	Ros	130	71	6100
†Hug 41	....	150°	195	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen.	V	A-L	D-R	D. B-L	B-L 51	U	5	Blo	Wis 6617	R	F	6.35	37.84	G	Shu 5572	Ros	130	71	6200
*Hug 86	....	127	127	P 36x6	DP36x6	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	Eis	D-R	D. B-L	B-L 51	U	5	Blo	Wis 8800B	R	F	7.85	46.85	A	Shu 550	Ros	78	57⅛	6410
*Hug 486	....	140	.....	P 34x7	DP34x7	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	A-L	D-R	D. B-L	B-L 51	U	5	Blo	Wis 8800B	R	F	7.85	46.85	A	Shu 550	Ros	81	61	8360
Indiana 126	....	162°	198½	S 36x5	S 36x10	Her L	4-4½x5¾	32.4	L	PC	Pie	McC	Str	V	Eis	A-L†	P. B&B	B-L 55 Max	A	7	Spi	Tim 65700D	W	½	8.5	80.7	B*	Shu 5550	Ros	138	83	7400
Indiana 626	....	168°	204½	S 36x5	S 36x10	Wis H	6-4x5	38.5	H	FP	K.P.	Lon	Str	V	Eis	A-L†	P. B&B	B-L 55 Max	A	7	Spi	Tim 65700D	W	F	7.75	73.6	B*	Shu 5550	Ros	132	83	7625
Indiana 627	....	168°	216¾	P 32x6	P 38x9	Wis H	6-4x5	38.4	H	FP	K.P.	Lon	Str	V	A-L	A-L	P. B&B	B-L 55	U	4	Spi	Cla 720	S	½	7.00	42.8	A*	Shu 5550	Ros	138	83	6500
Indiana 628	....	216	216¾	P 34x7	DP34x7	Wis H	6-4x5	38.4	H	FP	K.P.	Lon	Str	V	A-L	A-L	P. B&B	B-L 55	U	4	Spi	Cla 720	S	½	6.28	42.8	A*	Shu 5550	Ros	180	131	6585
Indiana 127	....	162°	198½	P 36x5	P 36x10	Her L	4-4½x5¾	32.4	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 55	U	4	Spi	Cla 720	S	½	8.00	42.8	A*	Shu 5550	Ros	138	83	6350
Indiana 127A	....	141	141	P 32x6	DP34x7	Her K	4-4¼x5¾	28.9	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 51	U	5	Spi	Cla 720	S	½	7.00	41.72	A*	Shu 5550	Ros	87	56½	6600
Indiana 627A	....	147	147	P 32x6	DP34x7	Wis H	6-4x5	38.4	I	FP	K.P.	Lon	Str	V	Eis	A-L†	P. B&B	B-L 51	U	5	Spi	Cla 720	S	½	7.00	41.72	A*	Shu 5550	Ros	87	56½	7000
*Kenworth J	3750	172	212	S 36x5	S 36x10	Bud EBU	4-4¼x5½	28.9	L	PC	Bud	Per	Zen	V	Bos-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim 65706DH	W	F	7.75	46.8	A*	Tim 15733	Ros	132	89	6300

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Trade Name and Model	General					Engine								Electrical System		Clutch	Gearset			Universals (Make)	Rear Axle			Gear Ratios		Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Standard Wheelbase		Chassis Weight (lbs.) (stripped)
	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Tire Size: Front (inches)	Tire Size: Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Fuel System: Carburetor (Make)	Fuel System: Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds		Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low				Cab to rear of frame	Cab to rear axle	
3 Ton—Cont'd																															
*Kenworth G	3450	172	212	P 32x6	DP32x6	Bud DW6	6-3⅜x5	33.7	L	PC	Bud	Per	Zen	V	D-R	D-R	D. B-L	B-L 35	U	4	Spi	Cla B721	B	½	6.25	33.4	A*	Tim 15733	Ros	132	87	5200
King Zeitler 60		156°		S 36x5‡	S 36x10	Con K4	4-4⅛x5¼	27.2	L	FP	Pha	Chi	Str	G	Eis	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65700D	W	F	9.25	49.5	A*	Tim 15302	Ros			6200
King Zeitler 62A				P 34x7	DP34x7	Con 6B	6-3⅜x5	33.7	L	PC	Han	Chi	Zen	G	Bos-R	Bos-R	D. B-L	B-L 55 Max	A	7	Blo	Tim 65700SP	W	F	7.75	73.6	B*	Tim 15302	Ros			6200
Kleiber Speed	4000	190	192½	P 34x7	DP34x7	Con 18R	6-4x4½	38.4	L	FP	Non	Own	Str	G	Bos-R	Bos-R	D. B-L	B-L 55	U	4	Spi	Tim 65600	W	F	7.75	41.5	A	Tim 15302	Ros	170	106	6200
Kleiber	4100	163		S 36x5	DS36x5‡	Con L4	4-4½x5½	32.4	L	FP	Non	R-T	Str	V	Bos-R	Bos-A	D. B-L	B-L 60		4		Tim 65700D						Tim 1544B	Ros			
Kleiber Spec	4350	163		S 36x5	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	R-T	Str	V	Bos-R	Bos-A	D. B-L	B-L 60		4		Tim 65700SP						Tim 1544B	Ros			
Lange M	5100	140	222	P 38x7	DP38x7	Her YXC	6-4⅜x4¾	45.9	L	PC	Non	Own	Zen	V	Bos-R	Non	D. B-L	B-L 60 Max	A	7	Cle	Wis 1418	R	F	9.12	86.6	A*	Tim 15300	Ros	102	69½	6050
Lange H-1	4250	156	195	S 36x5	S 36x10	Her YXB	6-4x4¾	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Cle	Tim 65700D	W	F	9.33	50.0	A*	Tim 15300	Ros	139½	85½	6850
*Larrabee Deyo 60		184	220	P 34x7	DP34x7	Con 18R	6-4x4½	38.4	H	PC	Non	Per	Zen		D-R	D-R	D. B-L	B-L	U	4	Spi	Tim	W	F	Opt	Opt	E†‡	Tim	Ros	156	92⅜	
Le Moon HB30	3950	182	182	P 36x8	DP36x8	Wau 6KU	6-4¼x4¾	43.3		FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim 65706DH	W	F	6.00	32.10	G	Tim 15733H	Ros	162	105	6000
Le Moon HB31	3750	182	182	S 36x5	S 36x10	Wau 6KU	6-4¼x4¾	43.3		FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim 65706D H	W	F	7.25	38.78	G	Tim 15733H	Ros	162	105	6000
Le Moon H3V	5650	211	211	P 36x8	DP36x8	Wau 6KU	6-4¼x4¾	43.3		FP	Wau	Chi	Str	G	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Wis 1261K	R	F	6.38	34.13	A	Tim 1560	Ros	198	125½	8000
Maccar 64		177	220	S 36x5	DS36x5	Bud YBUI	4-4½x6	32.4	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65700S	W	F	8.5	45.4	A‡	Tim 15302	Ros	151⅛	95⅛	7500
Maccar 66		177	220	S 36x5	DS36x5	Bud BA	6-4⅝x5⅛	40.8	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65700S	W	F	8.5	45.4	A‡	Tim 15302	Ros	151⅛	95⅛	7500
Mack AB	3400	146½		S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	*8.87	43.0*	B*	Own AB	Own			
Mack AB	3850	164½		S 36x4	DS36x4	Own AB	4-4¼x5	28.9	L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	R	F	*9.25	44.9*	B*	Own AB	Own			
Mack BJ	5800	168½		S 36x8	DS36x8	Own A-L	6-4¼x5	43.3	L	PS	Non	Own	Str	E	N-E	N-E	P. Own	Own AL	A	4	Spi	Own AL	R	F	*4.25	22.4*	G*	Own AK	Own			
Moreland B-6	2200	158½		S36x4	S36x6	Con 16C	6-3⅝x4⅝	27.3	L	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 35	A	4	Cle	Tim 63721H	W	F	7.25	34.8	G†	Tim 14703H	Ros	132	78	4500
Nob'e 166		190		P 34x7	DP34x7	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Pie	Chi	Str	V	A-L	A-L	D. Ful	Ful	A	4	Blo	Tim 65706D	W	F	6.75	32.4	A	Tim 15303	Ros	144½	99½	7200
*Oneida CC9		160°		P 34x7	DP34x7	Wau 6XL	6-3½x4½	29.4	L	PS	Non	Per	Str	V	A-L	A-L	D. Ful	Ful GCL	A	4	Pet	Tim 65660	W	F	8.5		A	Shu 550	Ros			7200
Pierce-Arrow XB	3750	150	180	S 36x5‡	DS36x5‡	Own XB	4-4x5½	25.6	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own XB	A	4	Spi	Own XB	W	½	9.25	48.1	A*	Own XB	Own	125⅞	72⅞	6280
Rehberger B		162	180	S 36x5	S 36x10	Bud YBU	4-4½x6	32.4	L	PC	K.P.	Bus	Zen	V	Eis	D-R	D- B-L	B-L 51	U	4	Spi	Tim 6566	W	F	8.5	46.2	A*	Shu 5550	Ros	146¼	90	6460
*Relay 60C	4480	175		P 36x6	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Own 60	R	F	8.5	63.0	E	Tim 15733H	Ros	156	97½	7450
Reo GA	2035	163		P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han			
Reo GC	2140	179		P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han			
Reo GD	1985	134		P 32x6	DP32x6	Own	6-3⅜x5	27.3	L	PC	K.P.	Own	Sch	V	D-R	D-R	D. B-L	Own	U	4	Pet	Own	S	F	6.22	41.5	E†	Own	Han			
Republic 25		165°		S 36x5	S 36x10	Con K4	4-4⅛x5¼	27.2	L	FP	Pha	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U-M	Eat	I	D	8.40	40.3	B*	Eat	Jac	144¾	89	5800
Republic 25W		165°		S 36x5	S 36x10	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U-M	Eat	I	F	8.40	40.3	B*	Eat	Jac	144¾	89	5800
Republic 65		179°		P 34x7	DP34x7	Lyc TS	6-3⅞x5	36.2	L	PS	Non	Own	Zen	V	A-L	A-L	D. Ful	Ful	U	4	U-M	Eat	R	F	7.5	36.0	G*	Eat	Han	165	100½	6100
Sanford O		173	188	P 32x6	DP32x6	Bud	6-3⅜x5	33.7		FP	Non	Fed	Str	P	D-R	D-R	D. B-L	B-L	U	4	Blo	Eat	B	½	7.57	47.3	H	Eat	Ros	167	101¾	5100
*Schacht 65		151	198	S 36x5	S 36x12	Wau KU	6-4¼x4¾	43.3	L	PC	Han	Own	Zen	G	Bos-A	Non	D. B-L	B-L 60	A	7	Spi	Own	R	F	10.3	65.0	A‡	Own	Own	152	95⅛	7500
Selden Roadmaster 47		165	180	P 32x6	DP32x6	Con 6B	6-3⅜x5	33.7	L	FP	Non	Own	Str	V	D-R	Bos-A	D. B-L	B-L 35	U	4		Cla 720	S	½	Opt	Opt	A‡	Shu	Ros	168	97	5500
*Service 60Z	4480	175		S 36x5	S 36x12	Bud BUS	6-4x5½	38.4	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 51	U	5	Blo	Tim 65706DH	W	F	8.5	63.0	E	Tim 15733	Ros	156	97½	7100
Sterling DW14-64		163	177	S 36x4	S 36x8	Own 6XK	6-3¾x4½	33.7	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 51	U	4	Spi	Tim 65600	W	F	9.25	49.4	B*	Tim 15300	Ros	149¼	85¾	5625
Stewart 19X	3490	165	220	S 36x5	S 36x10	Lyc TS	6-3⅞x5	36.2	L	PS	Han	Mod	Str	V	D-R	D-R	D. Ful	Ful	U	4	Spi	Tim	W	F	7.25	47.0	E*	Sal	Ros	136¾	79½	6385
Studebaker 88	2985	184		B 7.50/20	B 7.50/20	Own	8-3½x4⅝	39.2	L	PC	Non	Lon	Str	O	D-R	D-R	D. Lon	Ful	U	3	Spi	Eat	S	½	5.11	19.8	G*	Eat	Ros			
U. S. 30	3375	Opt	215	S 36x5	S 36x10	Bud DW	6-3¾x5	33.7	L	PC	Bud	Own	Str	V	A-L	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65706D	W	F	8.5	45.5	B*	Shu 5550	Ros	149	95	6300
U. S. 31	3275	156°	179	S 36x5	S 36x10	Bud EBU-I	4-4¼x5½	28.9	L	PC	Bud	Own	Str	V	Spl	A-L	D. B-L	B-L 51	A	4	Blo	Tim 65706D	W	½	8.5	45.5	B*	Shu 5550	Lav	160	101	6000
Valley	3495	145°		P 34x7	P 34x7	Her	4-4¼x5¾	28.9		FP	Non	Chi			D-R	D-R	D. Ful	Ful	U	6		Wis	R		Opt	Opt		Shu				
Valley	3295	145°		P 38x7	P 38x7	Her	4-4¼x5¾	28.9		FP	Non	Chi			D-R	D-R	D. Ful	Ful	U	4		Wis	R		Opt	Opt		Shu				
†Victor 70	3495	162		P 34x7	P 40x8	Her WXC	6-4x4½	38.4	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Ful	Ful MGU	U	4	U-M	Wis 8913	D	R	7.85	55.1	G†	Shu 5550	Ros			5800
Ward La France 2B		Opt		S 36x5	DS36x5	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Str	G	Apo	A-L	D. B-L	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	A‡	Tim	Ros			5900
Ward La France 2B6		Opt.		S 36x6	DP36x6	Wau 6KU	6-4¼x4¾	43.3		FP	Wau	Own	Zen	V	Bos-R	A-L	D. B-L	B-L 51	A	4	Spi	Tim	W	F	7.25	38.8	B‡	Shu 5550	Ros			
*White 58	4400	180°	195	S 36x5‡	DS36x5‡	OwnGRB-I	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	L-N‡	L-N‡	P. Own	Own 4B	U	4	Spi	Own	R	F	7.6	49.7	B*	Own	Own	148½	91½	7535
Witt-Will SS		168°	172	S 36x4‡	S 36x10	Con K4	4-4⅛x5¼	27.2	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65700D	W	F	9.25	40.0	A*	Tim 15300	Ros	136⅛	79⅛	5700
Witt-Will S-L		Opt		S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65700D	W	F	Opt	Opt	A*	Tim 15300	Ros			5850
Witt-Will SL6				P 34x7	DP34x7	Con 18R	6-4x4½	38.4	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	U	4	Spi	Tim 65706B	W	F				Tim 15300	Ros			
Woods 53 W 6		160	184	P 34x7	P 36x8	Bud DW6	6-3⅜x5	33.7	L	PC	Non	Chi	Zen	V	D-R	D-R	D. B-L	B-L 55	A	7	Blo	Tim	W	F	7.75		F†	Tim	Ros	141	105	6000
†World D-115		168½		P 36x8	DP36x8	Lyc	8-3¼x4½	33.8	L	PC	Han	Mod	Zen	O	A-L	A-L	P. Lon	B-L	U	4	Spi	Tim	S	F	7.8	Opt	F	Shu	Ros	144¼	88¼	6100
3½ Ton																															
American La France W		Opt	201¾	S 36x5	S 36x10	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.6	B*	Own 2R		132	81⅞	6600
Autocar HS	4100	114	203	P 34x6	P 36x12	Own*	4-4½x5½	32.4	L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	8.72	55.28	B	Own J	Ros	131½	76	6900
Autocar SHS	4400	114	203	P 34x6	P 36x12	Own*	6-4x3⅝x5½	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	8.72	55.28	B	Own J	Ros	131½	76	7000
Autocar TS	5350	187	213	P 36x8	DP36x8	Own	6-4⅜x4¾	45.9	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	7.24	46.55	B	Own J	Ros	175¼	104¾	7100
Biederman		180°	220	S 36x6	S 36x12	Con 6B	6-3⅜x5	33.7	L	PC	Han	Own	Zen	G	D-R	D-R	D. B-L	B-L 51	U	4	Spi	Tim	W	F	9.5	52.0	A*	Shu	Ros	164		7000
Chicago 35C		Opt	Opt	S 36x5	S 36x10	Wau CU	4-4⅜x5¾	30.6	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 55 Max	A	7	Pet	Tim 66702DH	W	F	10.33	98.1	B†	Tim 16302	Ros	Opt	Opt	8570
Clinton 85-6		190	Opt	P 34x7	DP34x7	Bud BUS	6-4x5½	38.4	L	FP	Non	Per	Str	V	Spl	D-R	B-L	B-L 55	A	4	Blo	Tim 65600SP	W	F	7.75	73.6	B*	Tim 15302	Ros	Opt	Opt	5975
Clydesdale 4		177°		S 36x6	DS40x6	Con B5	4-4¾x6	36.0	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D.B-L	B-L 60 Max	A		Spi	Tim 6666	W	F	10.3	98.16	A*	Tim 16300	Ros			7500
Clydesdale 4X		177°		S 36x5	DS40x5	Con L4	4-4½x5½	32.4	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 60 Max	A	7	Spi	Tim 6666	W	F	10.3	98.16	A*	Tim 16300	Ros			7300
Coleman D40X		130	184	P 40x8	P 40x8	Bud BA	6-4⅛x5⅛	40.8	L	FP	Bud	R-T	Zen	V	D-R	D-R	D. Ful	Ful RU16	U	8	Spi	Wis	R	F	8.33	159.0	E	Wis	Ros	144	89	8900
*Commerce 70Z	5250	175		S 36x6	S 36x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8200
Diamond T700		171½		S 36x5	S 36x10	Her YXC	6-4⅜x4¾	45.9	L	PC	Han	G&O	Zen	G		A-L	D. Cov	Cov	A	4	Spi	Tim	W	F	10.3	52.2	B†‡	Tim	Ros			8300
Dixon	4500	160		S 36x5	S 36x10	Her G	4-4¾x5¾	36.1	L	PC	Pie	G&O	Zen	V	Eis	D-R	D. Ful	Ful	U	4	Spi	Tim 6666	W	F	8.75	45.0	A	Shu 610	Ros			6600
Duplex EF		130		S 36x8	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PS	Non	Lon	Zen	V	Eis	A-L	D. B-L	B-L	U	8	Pet	Own	I		8.00	86.0	A*	Own	Woh			6500
Federal 3C6		191	230	P 36x8	DP36x8	Con 20R	6-4½x4¾	40.8	I	PC	Con	Lon	Zen	V	D-R	D-R	P. B&B	B-L 55	A	7	Opt	Tim 65704SP	W	F	6.8	64.12	B	Own	Gem			6700
Federal UL7		163	199	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Opt	Tim 65704SP	W	F	8.5	80.75	B	Own	Gem	126	85¾	6600
*F.W.D. U-6	4575	148		S 36x6	S 36x6	Wau	6-4x4¾	38.4	L	PC	Wau	Per	Zen	V	Eis	Non	O. H-S	Own	A	5	Blo	Own U	B	F	8.9	88.6	B	Own U	Ros	132	93	7200

*Garford 70Z	5250	175	.....	S 36x6	S 36x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8200
Gotfredson W64A	....	160	180	S 36x5	S 36x10	Bud YBUI	4-4½x6	32.4	L	PC	Pie	McC	Zen	V	Bos-R	D-R	D. B-L	B-L 55 Max	A	7	Spi	Tim65706DHP	W	F	9.33	88.64	G	Tim 15730H	Ros	.....	.....	6500
Gotfredson W66A	....	164	184	S 36x5	S 36x10	Bud BA6	6-4⅛x5⅛	40.9	L	PC	Pie	Lon	Zen	V	Bos-R	D-R	D. B-L	B-L 55 Max	A	7	Spi	Tim65706DHP	W	F	7.75	73.63	G	Tim 15730H	Ros	.....	.....	6800
*G-P 82-4	....	172	Opt	P 38x7	DP38x7	Wau DR	4-4½x6¼	32.4	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 66700	W	F	8.25	.....	...	Shu 630-12	Ros	.....	.....	8200
*G-P 82-6	....	172	Opt	P 38x7	DP38x7	Wau 6KU	6-4¼x4¾	43.3	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 66700	W	F	8.25	.....	...	Shu 630-12	Ros	.....	.....	8200
Gramm Bernstein 30	....	150	168	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful G7	A	8	Own	She	W	½	7.75	63.7	B*	She	Ros	130	81¼	6560
Hahn 76	....	196	218	P 34x7	DP34x7	Her YXC	6-4⅜x4¾	45.9	L	PC	Han	Chi	Zen	V	Bos-R	L-N	D. B-L	B-L 51	U	4	Spi	Tim 65706D	W	F	7.25	38.7	A‡	Tim 15302	Ros	180	113	5600
Harvey WHC	4250	155	185	S 36x6‡	S 36x12	Bud YBU-1	4-4½x6	32.4	L	PC	McC	Own	Str	G	Eis	Non	D. B-L	B-L 60	A	8	Spi	Tim 66600	W	F	10.3	84.5	A*	Tim 16300	Ros	117¼	80¾	8950
†Hug 87	....	117	.....	P 38x7	DP38x7	Bud DW6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	Eis	DNR	B-L	B-L 51	U	5	Blo	Wis 8800B	R	F	7.85	46.85	A	Shu 5550	Ros	96⅞	64½	6550
*Hug 90	....	127	127	P 38x7	DP38x7	Bud DW-6	6-3¾x5	33.7	L	PC	Bud	You	Zen	V	Eis	D-R	D. B-L	B-L 51	A	7	Blo	Wis 1235K	R	F	8.9	85.12	A	Shu 610	Ros	78	57⅛	9565
Indiana 136	....	162½°	198½	S 36x5	S 36x12	Her L	4-4½x5¾	32.4	L	PC	Pie	McC	Str	V	Eis	A-L†	P. B&B	B-L 55 Max	A	7	Spi	Tim 65700D	W	F	8.5	80.7	B*	Shu 5550	Ros	138	83	7400
Indiana 636	....	168½°	204½	S 36x5	S 36x12	Wis H	6-4x5	38.4	H	FP	K.P	McC	Str	V	Eis	A-L†	P. B&B	B-L 55 Max	A	7	Spi	Tim 65700D	W	F	7.75	73.6	B*	Shu 5550	Ros	132	83	7625
Int. Harvester 74C	....	154°	200	S 36x6‡	S 40x12	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own	C	D	10.6	86.0	B*	Own	Own	120	82	8715
*Int. Harvester 74	....	160°	200	S 36x6‡	S 40x12‡	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Eat 74-100000	R	F	10.45	62.0	B*	Own	Own	146	88	8175
Int. Harvester HS74	....	160°	235	S 36x6‡	S 40x12‡	Ha S 152	4-4¾x5½	36.1	H	PC	Ha S	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 74-100000	R	F	7.85	70.49	E*	Eat 74F	Own	120	81⅞	9690
*Int. Harvester HS74C	....	160°	235	S 36x6‡	S 40x12	Ha S 152	4-4¾x5½	36.1	H	PC	Ha S	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	8.81	79.11	E*	Eat 74F	Own	120	81⅞	10290
King Zeitler 75	....	156°	.....	S 36x6‡	S 40x12‡	Con L4	4-4½x5½	32.4	L	FP	Pha	Chi	Str	G	Eis	A-L‡	D. B-L	B-L 55 Max	A	4	Blo	Tim 66600	W	F	10.3	55.2	A*	Tim 16302	Ros	.....	.....	7800
Kleiber	4800	170	.....	S 36x5‡	DS36x6‡	Con B5	4-4¾x6	36.0	L	FP	Non	R-T	Str	V	Bos-R	Bos A‡	D. B-L	B-L 60	A	4	Spi	Tim 6666	W	F	8.75	46.8	A	Tim 1632B	Ros	.....	.....	7600
*Larrabee 70	....	195	205	P 34x7	DP 34x7	Con 20R	6-4⅛x4¾	40.9	H	PC	Non	Per	Zen	G	D-R	D-R	D. BL-	B-L	A	7	Spi	Tim	W	F	Opt	Opt	E†‡	Tim	Ros	168	104⅛	8900
Le Moon H40	4350	184	184	S 36x6	S 36x12	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	G	A-L	A-L'	D. B-L	B-L 55	A	4	Spi	Tim 66700D	W	F	8.75	46.81	A	Tim 16300	Ros	162	105	8000
Luedinghaus	....	160°	186	S 36x6	S 40x12	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	G	Eis	A-L	D. B-L	B-L 55	A	4	Spi	Tim 6666	W	F	10.00	.....	A*	Shu 610	Ros	144	90	7760
Mack AC	4950	168°	.....	S 36x5	DS40x5	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	*7.54	48.4*	D*	Own AC	Own	.....	.....	.....
Mack AK	4850	174°	.....	S 36x5	DS36x5	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AK	A	4	Spi	Own AK	R	F	*6.91	45.3*	G‡	Own AK	Own	.....	.....	.....
Master 51	....	158°	.....	S 36x5	S 40x12	Bud YBU-I	4-4½x6	32.4	...	FP	.....	.....	Zen	...	Opt	.....	D. Ful	Ful H	A	10	Spi	Tim 6666	W	F	.....	.....	A‡	Tim	Ros	.....	.....	8400
Master 55	....	158°	.....	S 36x5	S 40x12	Jackson	4-4¼x6⅝	28.9	...	FP	.....	.....	Str	...	Spl	.....	D. Ful	Ful H	A	10	Spi	Tim 6666	W	F	.....	.....	A‡	Tim	Ros	.....	.....	8400
Master 61	....	158	.....	S 36x5	S 40x12	Bud BTU	4-5x6½	40.0	L	PC	Pie	Chi	Zen	V	Eis	Non	D. Ful	Ful	A	4	Spi	Tim 6666	W	F	Opt	Opt	A‡	Tim 1630	Ros	.....	.....	8400
Menominee N	3715	165	175	P 34x7	DP34x7	Wau 6KS	6-4x4¾	38.4	H	FP	Non	Per	Str	V	D-R	D-R	P. B&B	Cot RUI	U	4	Pic	Wis 8800	R	F	Opt	Opt	A	Shu 610	Ros	139	85	6200
Moreland E6	3700	182	.....	P34x7	P 34x7	Her WXC	6-4x4½	38.4	L	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 51	U	4	Cle	Tim 65000H	W	F	6.5	34.8	G‡	Tim 15733H	Ros	156	99	6000
*Oneida D-9	....	170	.....	P 38x7	DP38x7	Wau DU	4-4½x6¼	32.4	L	PS	Non	Mod	Str	...	Apo	A-L	B-L	B-L 60	A	4	Pet	Tim 6660	W	F	8.75	.....	A	Con 1803	Ros	.....	.....	7885
Pierce-Arrow HB	4500	156°	198	S 36x5	DS36x6	Own	4-4x5½	25.5	T	FP	Own	G&O	Str	P	D-R	D-R	D. Own	B-L 55	A	7	Spi	Own	W	F	7.8	.....	B	Tim	Own	131 1/16	76 11/16	7800
*Relay 70C	5250	175	.....	P 36x6	S 40x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	P. B&B	Cov SHO	A	8	Blo	Own 74	R	F	9.95	84.18	A	Tim 16302	Ros	144	94½	8600
Republic S25W	....	165°	.....	S 36x5	S 36x12	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U-M	Eat	R	F	8.85	42.48	B*	Eat	Jac	144¾	89	6100
*Schacht 65	....	160	198	S 36x5	S 36x12	Wau KU	6-4¼x4¾	43.3	L	PC	Pie	Own	Zen	G	Bos-A	.....	D. B-L	B-L 60	A	7	Spi	Own	R	F	10.3	65.0	A‡	Own	Own	152	95 1/16	7500
*Service 70Z	5250	175	.....	S 36x6	S 36x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8200
Standard 3½-5 K	....	160°	172	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Sim	Lon	Str	V	Eis	Bos A*	D. B-L	B-L 55	A	7	Spi	Tim 66700SP	W	F	6.80	83.1	A*	Tim 16300	Ros	144	93¾	7465
Standard 3½-5KS	....	160°	172	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Sim	Lon	Str	V	Eis	Bos A‡	D. B-L	B-L 60	A	7	Spi	Tim 66700SP	W	F	6.80	83.1	A*	Tim 16300	Ros	144	93¾	7519
Studebaker 99	3485	184	.....	B 750/20	B 750/20	Own	8-3½x4⅜	39.2	L	PC	Non	Lon	Str	O	D-R	D-R	D. Lon	Ful	U	4	Spi	Eat	S	½	5.11	24.6	G*	Eat	Ros	.....	.....	5505
*United 70	....	158⅞	.....	S 36x5	S 36x5	Her L	4-4½x5¾	32.4	L	PC	Pie	Per	Str	G	Eis	A-L	D. B-L	B-L 55	A	4	Blo	Wis 1400	R	F	9.12	48.7	A*	Shu 5550	Ros	131⅝	85½	6200
*United 70C6	....	158⅞	.....	S 36x5	S 36x5	Con 8T	6-4⅛x5¼	40.8	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 55	A	4	Blo	Wis 1400	R	F	9.12	48.7	A*	Shu 5550	Ros	130¼	84⅛	6400
†Victor 75	3895	162	.....	P 34x7	DP34x7	Her WXC	6-4x4½	38.4	L	PC	Non	Lon	Zen	V	D-R	D-R	D. Ful	Ful MGU	U	4	U-M	Wis 891	D	R	7.85	55.1	G†	Shu 5550	Ros	.....	.....	6000
Walter FK	6100	Opt	118	P 40x8	P 40x8	Own 6	6-4¼x4¾	43.4	L	PC	Own	Own	Str	V	Eis	D-R	. Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	108	78	7500
Ward La France 4B	....	Opt	.....	S 36x5	DS36x5	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Str	G	Apo	A-L	D. B-L	B-L 55	A	4	Spi	Tim	W	F	7.25	38.8	A‡	Tim	Ros	.....	.....	6800
Ward La France 4B6	....	Opt	.....	P 34x7	DP34x7	Wau 6QL	6-4x5¾	38.4	L	PC	Wau	Fed	Zen	V	Bos-R	A-L	D. B-L	B-L 55	A	4	Spi	Tim Spec.	W	F	6.00	32.1	B‡	Shu	Ros	.....	.....	7000
*White 55	4650	174°	215	S 36x5‡	DS40x5	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	.....	L-N‡	P. Own	Own 4B	U	4	Spi	Own	R	F	10.1	66.1	B*	Own	Own	167⅝	107⅛	8402
Witt-Will L	....	156°	192	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Pie	Own	Zen	V	Eis	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65700D	W	F	Opt	.....	A*	Tim 15300	Ros	139	85	7750
Witt Will L6	....	.....	.....	P 34x7	DP34x7	Con R 20	6-4⅛x4¾	40.8	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	4	Spi	Tim 65706B	W	F	.....	.....		Tim 15300	Ros	.....	.....	.....
Woods 60W4	....	146	160	S 36x5	S 36x10	Bud YBU	4-4½x6	32.4	L	PC	Pie	Chi	Zen	V	Bos-A	Non	D. B-L	B-L	A	7	Blo	Tim	W	F	Opt	.....	A*	Shu	Ros	141	80	6500
4 Ton																																
Acorn 70	4250	162	.....	S 36x6	S 40x12	Bud YBU-1	4-4½x6	32.4	L	PC	McC	Chi	Zen	G	Bos-R	.....	D. Ful	B-L 60	U	8	Pet	Tim 66600	W	F	Opt	Opt	A	Tim 1632	Ros	.....	.....	8500
American La France W	....	Opt	201¾	S 36x5	S 36x10	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.6	B*	Own 2R	.....	132	81 1/16	6600
Armleder 70-6	....	156	186	S 36x6	S 36x12	Bud BUS	6-4x5⅛	38.4	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Spi	Tim	W	F	10.3	55.3	B*	Tim	Ros	138	87¾	7600
Armleder 70	....	156°	186	S 36x6	S 36x12	Bud YBU-1	4-4½x6	32.4	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Spi	Tim	W	F	10.3	55.3	B*	Tim	Ros	138	87¾	7500
Atterbury 22D	....	174°	198	S 36x5	DS36x6	Con L4	4-4½x5½	32.4	L	FP	Pie	Fed	Zen	V	Bos-A	A-L	D. B-L	B-L 55 Max	A	7	Spi	Tim	W	F	10.3	83.1	A*	Tim	Gem	142¾	93¼	8000
Brockway R	....	164°	191¼	S 36x5‡	S 36x12‡	Con L4	4-4½x5½	32.4	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 55	A	4	Spi	Tim 66700S	W	F	8.75	46.8	A*	Tim 16300	Ros	177¼	102¾	7890
Brockway RT	....	175⅝°	200¼	S 36x5‡	S 36x12‡	Con B7	4-5x6	40.0	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 60	A	4	Spi	Tim 66700S	W	F	7.80	41.6	A*	Tim 16300	Ros	176	104⅝	8100
Chicago 40C	....	Opt	Opt	S 36x6	S 36x12	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 70 Max	A	7	Pet	Tim 66702D H	W	F	10.33	97.1	B‡	Tim 61302	Ros	Opt	Opt	10175
Clinton 90	....	190	Opt	S 36x5	DS36x6	Bud YTU	4-4½x6	32.4	L	PC	Bud	Own	Zen	V	Spl	D-R	D. B-L	B-L 55	A	4	Blo	Tim 66600	W	F	8.75	46.8	A*	Tim 16300	Ros	Opt	Opt	8000
Clinton 90M	....	190	Opt	S 36x5	DS36x6	Bud YTU	4-4½x6	32.4	L	PC	Bud	Own	Zen	V	Spl	D-R	D. B-L	B-L 55 Max	A	7	Blo	Tim 66600	W	F	8.75	83.1	A*	Tim 16300	Ros	Opt	Opt	8050
*Commerce 80Z	5330	175	.....	S 36x6	S 36x14	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8400
*Corbitt 86	....	178	230	P 36x8	DP36x8	Con 20R	6-4⅛x4¾	40.8	H	FP	Non	Per	Zen	V	D-R	D-R	D. B-L	B-L 55	A	7	Spi	Tim 66700D	W	F	.....	.....	A‡	Tim 16300	Ros	Opt	Opt	8140
*Corbitt 84	....	178	230	S 36x5	S 36x10	Con L4	4-4½x5½	32.4	L	FP	Sim	Per	Zen	V	Eis	D-R‡	D. B-L	B-L 55	A	7	Spi	Tim 66700D	W	F	9.5	90.2	A‡	Tim 16300	Ros	164	108	7370
Day-Elder K6	....	170	196	S 36x5	S 36x12	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Bud	Bus	Zen	V	D-R	D-R	D. Ful	Ful R	A	4	Spi	Tim 66702D	W	F	10.33	49.6	A	Tim 16302	Ros	139½	79½	8500
Denby 27	....	170	.....	S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	PC	Han	Lon	Zen	G	Eis	.....	D. Ful	Ful	A	4	U-P	Cla	I	D	10.0	49.9	...	Tim	Ros	.....	.....	7020
*Diamond T800	....	185°	.....	P 36x8	P 36x8	Her YXC	6-4⅜x4¾	45.9	L	PC	Han	G&O	Zen	G	A-L	A-L	D. Cov	B-L	A	7	Spi	Tim	W	...	6.25	59.4	3†‡	Tim	Ros	.....	.....	.....
Fageol 445	5100	172°	205	S 36x6	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55 & 60	U&A	7	Spi	Tim 66700	W	F	6.92	124.37	B*	Tim 16300	Ros	168	101⅞	9300
Fageol 485	5850	172°	205	S 36x6	DS36x6	Wau A-B	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55 & 60	U&A	7	Spi	Tim 66700	W	F	6.92	124.37	B*	Tim 16300	Ros	168	95¾	9800
*Federal W4	....	164	188	S 36x5	S40x12	Con L4	4-4½x5½	32.4	L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Opt	Tim 66700SP	W	F	9.5	90.75	B	Tim 1632B	Gem	151	87	7250
*Garford 80Z	5330	175	.....	S 36x6	S 36x14	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8400
Gotfredson W84A	....	160	180	S 36x6	DS40x7	Bud YBUI	4-4½x6	32.4	L	PC	Pie	McC	Zen	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 66700SP	W	F	10.33	98.13	B	Tim 16302	Ros	.....	.....	8400
Gotfredson W86A	....	169	189	S 36x6	DS40x7	Bud GL6	6-4½x6	48.6	L	PC	Pie	McC	Zen	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 66700SP	W	F	9.5	90.25	B	Tim 16302	Ros	.....	.....	8600
Gramm 45	4735	153°	200	S 36x5‡	S 36x12‡	Her L	4-4½x5¾	32.4	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 45	4735	153°	200	S 36x5‡	S 36x12‡	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 48 low bed	4735	156°	200	S 36x5‡	S 36x12‡	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful GU	U	4	Blo	Wis 1250	R	F	7.12	34.2	B*	Shu 5550B	Ros	138	83¾	7600
Gramm-Bernstein 40	....	156°	176	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	She	W	½	8.75	93.6	B*	Shu 610	Ros	144	87¾	8360
Grass Premier 80	....	167°	.....	S 36x4‡	S 36x8	Wau CU	4-4⅜x5¼	30.6	L	PC	Wau	Chi	Str	V	Eis	A-L	D. B-L	B-L 55	A	7	M.M.	Tim 65700SP	W	F	8.25	46.0	G	Con 1803	Ros	.....	.....	5400
Grass Premier 80-6	....	167°	.....	S 36x4‡	S 36x8	Wau 6KU	6-4¼x4¾	43.3	L	PC	Wau	Chi	Str	V	Eis	A-L	D. B-L	B-L 55	A	7	M.M.	Tim 65700SP	W	F	8.25	46.0	G	Con 1803	Ros	.....	.....	5800
Guilder J	4650	170	.....	S 36x5	DS36x6	Bud YTU	4-4½x6	32.4	L	PC	Pie	G&O	Zen	V	Eis	Non	D. B-L	B-L 55	A	4	Spi	Wis 1251K	R	F	7.50	54.0	A*	Shu 610	Ros	.....	.....	7500
Hahn M	....	160°	192	S 36x5	S 36x12	Con L	4-4¾x6	36.1	L	FP	Pha	Chi	Str	G	Bos-R	L-N	D. B-L	B-L 60	A	7	Spi	Tim 6666	W	F	10.25	.....	A	Tim 1632B	Ros	164	94	7200
*Hendrickson U 4	4300	Opt	Opt	S 36x6	S 40x14	Bud YBU-I	4-4½x6	32.4	L	FP	Pha	Chi	Zen	G	Spl	.....	D. B-L	B-L 60 Max	A	7	Spi	Tim 66700D	W	F	Opt	Opt	A*	Tim 16300B	Ros	Opt	Opt	7620
Indiana 138	....	162½	198½	S 36x5	S 36x12	Her L	4-4½x5¾	32.4	L	PC	Pie	Lon	Str	V	Eis	A-L†	P. B&B	B-L 60	A	7	Spi	Tim 66700	W	F	8.75	83.1	B*	Shu 5550	Ros	132	84¼	7800
Indiana 638	....	168½°	204½	S 36x5	S 36x12	Wis H	6-4x5	38.4	H	FP	K.P.	McC	Str	V	Eis	A-L†	P. B&B	B-L 60 Max	A	7	Spi	Tim 66700	W	F	8.75	83.1	B*	Shu 5550	Ros	132	84¼	8100
*Kenworth N	4395	170	200	S 36x6‡	S 40x12	Bud YBU	4-4½x6	32.4	L	PC	Bud	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 60	A	4	Spi	Tim 66702D	W	F	8.75	53.3	A*	Tim 16302	Ros	126	93	8800
Kissel Heavy Duty	....	168	.....	S 36x5‡	S 36x12‡	Wau DU	4-4½x6¼	32.4	L	PC	Pie	McC	Str	V	Eis	D-R‡	D. W-G	Ful H	A	4	Spi	Tim 16302	W	½	11.7	73.6	A*	Tim 66700	Ros	.....	.....	7600
*Kleiber	5000	202	.....	P 36x8	DP36x8	Bud BA6	6-4½x5⅛	48.6		PC	.....	Fed	Str	V	Bos-R	.....	D. B-L	B-L	A	7	Spi	Tim 65700SP	W	F	Opt	.....	A*	Tim 15302	Ros	.....	.....	7500
Lange F6	4650	168°	183	S 36x5	S 36x12	Her YXC	6-4⅜x4¾	45.9	L	PC	Non	Own	Zen	V	A-L	A-L	D. B-L	B-L 55	A	4	Cle	Tim 66700	W	F	10.5	56.0	A*	Tim 16300	Ros	159½	104½	8900

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Trade Name and Model	General			Tire Size		Engine							Fuel System		Electrical System		Clutch	Gearset				Rear Axle			Gear Ratios					Standard Wheelbase		
	Chassis Price	Standard Wheelbase (inches)	Maximum Wheelbase furnished	Front (inches)	Rear (inches)	Make and Model	Number of Cylinders Bore and Stroke	N.A.C.C. Rated H.P.	Valve Arrangement	Oiling System	Governor (Make)	Radiator (Make)	Carburetor (Make)	Fuel Feed	Ignition System (Make)	Generator and Starter (Make)	Type and Make	Make and Model	Location	No. of Forward Speeds	Universals (Make)	Make and Model	Final Drive	Type	Total Reduction in High	Total Reduction in Low	Brakes, Location	Front Axle Make and Model	Steering Gear (Make)	Cab to rear of frame	Cab to rear axle	Chassis Weight (lbs.) (stripped)
4 Ton—Cont'd																																
Le Moon H46		184	192	P 36x8	P 36x8	Wau 6KU	6-4¼x4¾	43.3		FP	Wau	Chi	Str	V	A-L	A-L	D. B-L	B-L 51	U	5	Opt	Tim 6370H	W	F	6.25	46.31	G	Tim 16302	Ros	162	105	
†Maccar 84		177	209¼	S 36x6	DS36x6	Bud YBUI	4-4½x6	32.4			Pie		Str	V	Bos-R		D. B-L					Tim 66702D						Tim 16302				
†Maccar 86		177	209¼	S 36x6	DS36x6	Bud BA-6	6-4⅛x5⅛	48.6			Pie		Str	V	Bos-R		D. B-L					Tim 66702D						Tim 16302				
Mack BJ	5800	168½°		S 36x8	DS36x8	Own A-L	4-4¼x5	43.3	L	PS	Non	Own	Str	E	N-E	N-E	P. Own	Own AL	A	4	Spi	Own AL	R	F	4.25*	22.4*	G*	Own AK	Own			
Master 55		158°		S 36x5	S 40x12	Jackson	4-4¼x6⅝	28.9		FP			Str		Spl		D. Ful	Ful 60				Tim	W				A‡	Tim	Ros			
Pierce Arrow WC	5100	162	180	S 36x5‡	DS36x6	Own WC	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own WC	A	4	Spi	Own WC	W	½	8.00	41.5	B*	Own WC	Own	133¼	78¾	8490
Rehberger C		174	192	S 36x6	S 36x12	Bud YBU	4-4½x6	32.4	L	PC	K.P.	Bus	Zen	V	Eis	D-R	D. B-L	B-L 55	U	4	Spi	Tim 6666	W	F	8.75	46.8	A*	Tim 16302	Ros	157¾	102	7940
•Relay 80C	5330	175		P 36x6	S 40x14	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	P. B&B	Cov SHO	A	8	Blo	Own 74	R	F	9.95	84.18	A	Tim 16302	Ros	144	94½	8800
Sanford R		159	188	P 34x7	DP34x7	Bud	6-3⅜x5	33.7		FP	Non	Fed	Str	P	D-R	D-R	D. B-L	B-L	U	4		Eat	R	F	8.85	99.7	G	Eat	Ros	188	106	6640
•Selden 47X		130	143	P 31x7	DP34x7	Con 6B	6-3⅜x5	33.7	L	FP	Non	Own	Str	V	D-R		D. B-L	B-L	A	7	Spi	Wis	R				A*	Shu	Ros	87	53	6260
•Service 80Z	5330	175		S 36x6	S 36x14	Bud BA6	6-4⅛x5⅛	40.8	L	PC	Non	Own	Zen	V	A-L	A-L	Own	B-L 60	A	7	Blo	Tim 66700D	W	F	10.33	98.2	A	Tim 16302	Ros	144	94½	8400
Sterling DC21-44		160	174	S 36x5	S 36x12	Own CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 51	U	4	Spi	Own	C	D	9.3	50.1	D*	Tim 15300	Ros	147¼	86¼	7080
•Stewart 22X	4200	165	220	S 36x5	S 36x12	Lye TS	6-3⅞x5	36.2	L	PC	Non	Own	Str	G	D-R	D-R	D. Ful	Ful	A	12	Spi	Tim	W	F	10.5	151.6	A	Sal	Ros	136¼	79½	7724
United 40D		124¼		P 34x7	DP34x7	Her OX	4-4x5	25.6	L	PC	Non	Per	Str	G	Eis	A-L	D. B-L	B-L 35	U	4	Blo	Wis 6600	R	F	7.75	41.46	A*	Shu 510	Ros	70⅜	54½	5100
•U. S. 40	4050	168°	185	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	Bud	Own	Str	V	Spl	A-L	D. B-L	B-L 55	A	4	Blo	Tim 66700D	W	F	10.3	54.8	B‡	Tim 16300	Lav	156	104	7900
Valley	3495	145°		P 36x7	P 36x7	Her	4-4½x5¾	32.4		FP	Non	Chi			D-R	D-R	D. Ful	Ful	U	4		Wis	R		Opt	Opt		Shu	Ros			
Ward La France 4D		Opt		S 36x5	DS36x6	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	G	Bos-R	A-L	D. B-L	B-L 60 Max	A	7	Spi	Tim 66900	W	F	9.5	90.2	B‡	Tim 16300	Ros			8750
Ward La France 4D6		Opt		S 36x5	DS36x6	Wau 6KU	6-4¼x4¾	43.3	L	PC	Wau	Own	Zen	V	Bos-R	A-L	D. B-L	B-L 60 Max	A	7	Spi	Tim 66900	W	F	9.5	90.2	B‡	Tim 16300	Ros			8750
Witt-Will A4		172°	192	S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC	Pie	Own	Zen	G	Eis	D-R	D. B-L	B-L 60	A	4	Spi	Tim 66700D	W	F	10.2	53.3	A*	Tim 16300	Ros	139	89	9200
Witt-Will A6						Con R20	6-4⅛x4¾	40.8	L	PC	Pie	Own	Zen	V	D-R	D-R	D. B-L	B-L 55	A	7	Spi	Tim 66700D	W	F				Tim 16300	Ros			
4½ Ton																																
•Acme 90L		192		S 36x5	S 40x12	Con B7	4-5x6	40.0	L	FP	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 60	A	7	Blo	Tim 66600	W	F	8.75	83.5	A	Tim 16300	Ros	168⅝	105⅞	7900
American La France S	5200	Opt	Opt	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	G&O	Zen	V	Bos-A	L-N	Own 5R	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 3R	Ros	Opt	Opt	9900
Republic 30		170°		S 36x5	S 36x12	Con L4	4-4½x5½	32.4	L	FP	Pha	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U.M	Eat	I	D	10.2	49.2	B	Shu	Han	145¾	90	6700
Republic 30W		170°		S 36x5	S 36x12	Wau CU	4-4⅜x5¾	30.6	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	U	4	U.M	Eat	I	D	10.2	49.2	B	Shu	Han	145¾	90	6700
5 Ton																																
Acorn 100	4800	160		S 36x6	S 40x14	Bud YBUI	4-4½x6	32.4	L	PC	McC	Chi	Zen	G	Bos-R		D. Ful	B-L 60	U	8	Pet	Tim 67700	W	F	Opt	Opt	A	Tim 1632	Ros			9000
Amer. La France V	5500	Opt	Opt	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R		Opt	Opt	9600
Am. La France Big Ch.	6500	226	196	P 40x8	DP40x8	Bud GL6	6-4½x6	48.6	L	FP	Bud	G&O	Str	V	D-R	D-R	P. B-L	Own	A	4	Own	Own 16R	R	F	6.13	33.0	A	Own 16R	Own	209	139	11000
Atterbury 24E		174°	204	S 36x6	DS40x7	Con B7	4-5x6	40.0	L	FP	Pie	Fed	Zen	V	A-L	Bos-A	D. B-L	B-L 60 Max	A	7	Spi	Tim	W	F	11.6	110.7	A*	Tim	Gem	159¾	89¼	10225
Autocar SCM	5000	162	198	P 34x7	P 36x14	Own	6-4½x4¾	48.6	L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own B	A	4	Spi	Own M	R	F	9.89	72.1	B	Own CL	Ros	139½	80½	8600
Biederman		180°	200	S 36x7	S 36x14	Con 7T	6-4¼x6	43.3	L	PC	Han	Own	Zen	G	D-R	D-R	D. B-L	B-L 60	U	7	Spi	Tim	W	F	11.5	60.6	A*	Shu	Ros	164		9200
Brockway T		175°	205⅜	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 60	A	4	Spi	Tim 68700S	W	F	10.0	53.5	B*	Tim 17300	Ros	182	105½	10065
Brockway T-18		178°	208¼	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700S	W	F	10.0	95.0	B*	Tim 17300	Ros	188	108½	10500
Clinton 120L		204	Opt	S 36x6	DS36x7	Bud BTU	4-5x6½	40.0	L	PC	Bud	Own	Zen	V	Spl	Bos-A	D. B-L	B-L 60	A	4	Blo	Tim 68702DHP	W	F	8.80	47.1	A†	Tim 17300	Ros	Opt	Opt	9550
Clinton 120LM		204	Opt	S 36x6	DS36x7	Bud BTU	4-5x6½	40.0	L	FP	Bud	Own	Zen	V	Spl	Bos-A	D. B-L	B-L 60 Max	A	7	Blo	Tim 68702DHP	W	F	8.80	83.6	A†	Tim 17300	Ros	Opt	Opt	9650
Clydesdale 2		176°		S 36x7	DS40x7	Con B7	4-5x6	40.0	L	FP	Own	Own	Zen	V	Bos-A	Bos A*	D. B-L	B-L 60 Max	A	7	Spi	Tim 6760	W	F	11.6	110.8	A*	Tim 17300	Ros			9750
Coleman X-100		144	184	P 42x9	P 42x9	Bud BA6	6-4⅛x5⅛	40.8	L	FP	Bud	R-T	Zen	V	D-R	D-R	D. Ful	Ful RU16	U	8	Spi	Wis 122	R	F	8.54	140.3	E	Wis 122F	Ros	168	105	9660
Coleman X100F		144	184	P 42x9	P 42x9	Bud GL	6-4½x6	48.6	L	FP	Bud	Per	Str	V	D-R	D-R	D. Ful	Ful HU16	U	8	Spi	Wis 122	R	F	8.54	175.0	E	Wis 122F	Ros	168	105	9820
•Corbitt 70		178	230	S 36x6	DS40x6	Con B7	4-5x6	40.0	L	PC	Sim	Per	Zen	V	Eis	L-N‡	D. B-L	B-L 60 Max	A	7	Spi	Tim 67700D	W	F	10.0	95.0	A‡	Tim 17300	Ros	164	108	9410
Day-Elder L		170°	196	S 36x6	DS40x7	Bud BBU	4-5x6½	40.0	L	PC	Bud	Bus	Zen	V	Eis	D-R‡	D. Ful	Ful H	A	4	Spi	Tim 67700D	W	F	10.2	64.6	A	Tim 17300	Gem	139½	79½	10000
Denby 210		170		S 36x6	DS40x6	Con B5	4-4¾x6	36.1	L	PC		Lon	Zen	G	Eis		D. Ful	Ful HU	A	4	U-P	Cla		D	12.5	62.7		Tim	Ros			8590
Dixon	4800	160		S 36x5	S 36x12	Her G	4-4¾x5¾	36.1	L	PC	Pie	G&O	Zen	V	Eis	D-R	D. Ful	Ful	A	8	Spi	Tim 6666	W	F	8.75	137.0	A	Shu 610	Ros			8100
•Douglas Six Wheeler		210		P 38x9	P 38x9	Bud GL6	6-4½x6	48.6	L	PC	Bud	Own	Zen	V	L-N	L-N	D. Ful	Ful HOG	A	8	Blo	Wis 7500	W	F	6.25	58.5	A‡	Shu 615	Ros	240	140	10000
Douglas		185°		S 36x6	S 40x12	Bud BBU	4-5x6½	40.0	L	PC	Non	Own	Zen	V	Bos-R	L-N	D. Ful	Ful HU	U	4	Blo	Wis 1450	R	F	9.12	57.5	A‡	Wis 50	Ros	216	130	9200
Duplex M 5-7		Opt		P 34x7	DS36x7	Bud GL6	6-4½x6	48.6	L	FP		Mod	Str	V	A-L	A-L	D. B-L	B-L 70		7	Pet	Tim 68700	W	F	Opt	Opt	A*	Shu	Ros			10000
•F.W.D. MF6	5000	148		S 36x8	S 36x10	Wau	6-4¼x4¾	43.3	L	PC	Wau	Per	Zen	V	Eis	Non	O. H-S	Own	A	5	Blo	Own M	B	F	8.9	88.6	B	Own M	Ros	132	93	7775
Freeman		186		P 36x8	DP36x8	Bud BA6	6-4⅛x5⅛	48.6		FP		Lon	Str		Bos-R	Bos-R	D. Ful	Ful HU16	U	4			B				E	Woh				
•General Motors K-102	4250	160°	184	S 36x6	S 40x14	Own 89	4-4½x6½	32.4	L	FP	K.P.	McC	Mar	V	Eis	D-R	D. Own	Own	A	7	Own	Tim 67600	W	F	10.0	86.3	A‡	Tim 1732	Own			9245
•G-P 92-4		158	Opt	P 38x7	DP40x8	Wau ER	4-5x6¼	40.0	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 68700	W	F	8.73			Shu	Ros			9600
•G-P 92-6		158	Opt	P 38x7	DP40x8	Wau 6AB	6-4½x4¾	48.6	L	PC	Wau	Chi	Str	V	Bos-R	A-L	D. B-L	B-L 55	U&A	7	M.M.	Tim 68700	W	F	8.73			Shu	Ros			9600
Gramm 60	5370	153°	200	S 36x6	S 36x14	Her G	4-4¾x5¾	36.1	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm 60	5370	153°	200	S 36x6	S 36x14	Lye TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm Bernstein 40		156°	176	S 36x5	DS36x5	Con L4	4-4½x5½	32.4	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	She	W	½	8.75	93.6	B*	Shu 610	Ros	144	87¾	8360
•Gramm-Bernstein 50		168°	188	S 36x6	DS40x6	Con B7	4-5x6	40.0	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	Wis 1010F	W	F	11.75	125.7	B	Shu 610	Ros	162	97	9700
Guilder K5	5250	170		S 36x6	DS40x6	Bud YTU	4-4½x6	32.4	L	PC	Pie	G&O	Zen	G	Eis	Non	D. B-L	B-L 60	A	4	M-E	Wis 1600	R	F	9.00		B*	Shu 650	Ros			8800
Hahn R		162°	200	S 36x6	S 40x12	Con B5	4-4¾x6	36.1	L	FP	Pha	Chi	Str	G	Bos-R	L-N	D. B-L	B-L 60	U	4	Spi	Tim 6760	W	F	10.25		A	Tim 1632B	Ros	164	94	8450
•Hendrickson V4	5300			S 36x7	S 40x14	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Zen	G	Spl	Bos-R†	D. B-L	B-L 70	A	7	Spi	Tim 67600D	W	F	Opt	Opt	G‡	Tim 17300	Ros	Opt	Opt	9800
†Hug 96		133		P 36x8	DP36x8	Bud DW6	6-3¾x5	33.7		FP	Bud	You	Zen	V	Eis	D-R	D. B-L	B-L 51	U	5	Blo	Wis 1255K	R	F	8.9	53.28	A	Shu 615	Ros	112⅞	80⅞	7400
Indiana 41		172°	196	S 36x6	S 40x12	Her G	4-4¾x5¾	36.1	L	PC	Pie	Lon	Str	V	Eis	Opt	P. B&B	B-L 60 Max	A	7	Spi	Tim 68700SP	W	F	10.0	95.0	B*	Shu	Ros	156	98¼	9600
Int. Harvester 104C		154°	200	S 36x6	S 40x14	Own	4-4¼x5	28.9	H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own	C	D	10.6	86.0	B*	Eat 74C	Own	120	82	8900
•Int. Harvester HS 104C		160°	235	S 36x6‡	S 40x14	Ha S 152	4-4¾x5½	36.1	H	PC	Ha S	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	10.03	90.52	E*	Eat 74C	Own	120	81⅞	10595
Kenworth S	5250	178	175	S 36x6	S 40x14	Bud BTU	4-5x6½	40.0	L	PC	Bud	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700SP	W	F	8.75	89.0	B*	Tim 17300	Ros	126	93	9700
Kissel Goliath		168		S 36x6	S 40x14	Wau DU	4-4½x6¼	32.4	L	PC	Pie	McC	Str	V	Eis		P. B-L	Ful H	A		Spi	Tim 17300	W	½	11.75	73.6	A*	Tim 67700	Ros			8800
Kleiber	5400	185		S 36x6‡	S 40x14‡	Con B5	4-4¾x6	36.1	L	FP	Non	R-T	Str	V	Bos-R	Non	D. B-L	B-L 60	A	4	Spi	Tim 6760	W	F	10.3	54.8	A	Tim 1730	Ros			10400
Luedinghaus		160°	186	S 36x6‡	S 40x6‡	Wau EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	G	Eis	Opt‡	D. B-L	B-L 60	A	4	Spi	Tim 67600	W	F	11.6		A*	Shu	Ros	144	90	9500

Maccar G1	....	186	204	S 36x6	DS40x6	Wis RBU	4-5x6	40.0	L	PC	Pie	Own	Str	V	Eis	D-R	D-R	B-L 60	A	4	Spi	Tim 6760D	W	F	10.2	54.8	A*	Tim 17300	Ros	180	101⅜	8975
Mack AC	4950	168°	....	S 36x5	DS40x5	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	*7.54	48.4*	D*	Own AC	Own	....	....	....
Mack AK	4850	174°	....	S 36x5	DS36x5	Own AK	4-4⅝x6	34.3	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AK	A	4	Spi	Own AK	R	F	*6.91	45.3*	G‡	Own AK	Own	....	....	....
Master 64	....	170°	....	S 36x6	S 40x14	Bud BTU	4-5x6½	40.0	L	PC	Pie	Chi	Zen	V	Opt	Non	D. Ful	Ful H	A	10	Spi	Tim 6766	W	F	Opt	Opt	A‡	Tim	Ros	....	....	....
Moreland EX6	3750	182	....	S 36x4	S 36x8	Her WXC	6-4x4½	38.4	L	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 51	U	5	Cle	Tim 65704H	W	F	7.75	46.0	G†‡	Tim 16710H	Ros	156	99	6500
Oneida E-9	....	180	....	S 36x8	DS40x7	Wau GU	4-5⅜x6¼	46.2	L	PS	Non	Mod	Str		Apo	A-L	B-L	B-L 60	A	4	Pet	Tim 67660	W	F	10.1	....	A	Tim 1730	Ros	....	....	9400
Pierce-Arrow RD	5400	162	198	S 36x6	DS36x7	Own RD	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RD	A	4	Spi	Own RD	W	F	7.8	40.4	B*	Own RD	Own	139¼	78¾	8750
Rehberger D	....	186	198	S 36x6	S 40x14	Bud BTU	4-5x6½	40.0	L	PC	K-P	Bus	Zen	V	Eis	D-R	D. B-L	B-L 60	A	4	Spi	Tim 6760	W	F	10.25	54.8	A*	Tim 17300	Ros	172½	109	10010
Republic 35	....	170°	....	S 36x6	S 36x14	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	V	Bos-A	A-L	D. Ful	Ful	A	8	U-M	Eat	I	D	7.67	95.5	B*	Shu	Han	145¾	91½	7500
*Schacht Series 70	....	168	....	S 36x6	DS40x7	Wau SRL	6-4⅜x5⅛	45.9	L	PC	Han	Own	Zen	G	Bos-A	Non	D. B-L	B-L 70	A	7	Spi	Own	W	F	14.0	88.2	A‡	Own	Ros	....	....	10000
Selden 77	....	170	220	P 36x8	DS36x6	Bud GF6	6-4¾x6	54.15	L	FP	Non	Own	Str	V	D-R	D-R	D. B-L	B-L 60	A	7	Blo	Wis	W	F	....	....	A‡	Shu	Ros	216	139	8842
Sterling EW 20-44	....	174	....	S 36x5	S 40x10	Own DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 60	A	4	Spi	Tim 66700	W	F	8.75	52.0	A*	Tim 16300	Ros	....	....	7750
United 100	....	150½	170½	S 36x6	S 40x14	Her G	4-4¾x5¾	36.1	L	PC	Pie	Per	Zen	G	Eis	A-L	D. B-L	B-L 60	A	4	Blo	Wis 1800	R	F	11.2	106.4	A*	Shu 610	Ros	143⅛	81	8900
Walter FH	7600	Opt	136	P 40x8	DP40x8	Own 6	6-4½x5¾	48.6	L	PC	Own	Own	Zen	V	Eis	D-R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	9000
Ward La France 5B	....	Opt	....	S 36x6	DS40x7	Wau EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	G	Bos-R	A-L‡	D. B-L	B-L 60 Max	A	7	Spi	Tim Spec.	W	F	7.8	74.0	A‡	Tim	Ros	....	....	7900
Ward La France 5B6	....	Opt	....	S 36x6	DS40x7	Wau 6AL	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Bos-R	A-L‡	D. B-L	B-L 60 Max	A	7	Spi	Tim Spec	W	F	7.8	74.0	B‡	Tim	Ros	....	....	8350
*White 52	5100	174°	245	S 36x6	S 40x12	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	......	L-N‡	P. Own	Own GRBA	U	5	Spi	Own	R	F	11.7	92.3	B*	Own	Own	166⅛	105⅝	9184
*White 55	4765	174°	215	S 36x6‡	DS40x6	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Zen	V	......	L-N‡	P. Own	Own 4B	U	4	Spi	Own	R	F	10.11	66.1	B*	Own	Own	167⅝	107⅛	8895
Witt-Will AA	....	172°	192	S 36x6	DS40x7	Con B5	4-4¾x6	36.1	L	FP	Non	Own	Zen	G	Eis	D-R	D. B-L	B-L 60	A	7	Spi	Tim 67600	W	F	10.2	53.3	A*	Tim 1732B	Ros	139	89	9350

5½ Ton and Over

*Acme 150	....	192	....	S 36x7	S 40x8	Con B7	4-5x6	40.0	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L	B-L 60	A	7	Blo	Tim 68700DP	W	F	10.0	95.0	B	Tim 17300	Ros	168⅝	105⅞	9650
*Acme 151	....	193	....	S 36x7	S 40x8	Con 15H	6-4⅛x5¾	48.6	L	PC	Pie	Per	Str	V	Eis	A-L	D. B-L.	B-L 60	A	7	Blo	Tim 68700DP	W	F	10.0	95.0	B	Tim 17300	Ros	167¾	104	10000
Amer. La France Z6½	5750	Opt	Opt	S 36x7	DS40x7	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	....	Opt	Opt	9600
Amer. La France U7½	6000	Opt	Opt	S 36x7	DS40x8	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	11.67	63.5	B*	Own 5R	....	Opt	Opt	9800
Brockway BT	....	156¼°	207⅜	S 36x6	DS40x8	Bud BBU	4-5x6½	40.0	L	PC	K.P.	Bus	Zen	V	Eis	L-N‡	D. B-L	B-L 70	A	7	Spi	Tim 68700S	W	F	10.0	95.0	B‡	Tim 17300	Ros	146	84¾	11060
Chicago 70C	....	Opt	Opt.	S 36x6	S 40x14	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Zen	G	Apo	A-L‡	D. B-L	B-L 70 Max	A	7	Pet	Tim 68700	W	F	11.66	109.6	B‡	Tim 17302	Ros	Opt	Opt	10175
†Chicago 36D	....	173°	Opt	P 34x7	P 36x8	Wau KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Zen	G	A-L	A-L	D. B-L	B-L 55 Max	A	7	Cle	Tim63793-DH	W	F	11.6	61.7	B†‡	Tim 16310	Ros	Opt	Opt	8800
†Chicago 64D	....	168½°	Opt	S36x6	S 36x10	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Zen	G	A-L	A-L	D. B-L	B-L 70 Max	A	7	Cle	Tim66794-5DH	W	F	17.1	108.2	B†‡	Tim 17300	Ros	Opt	Opt	13000
†Chicago 66D	....	175¾°	Opt	S 36x6	S 36x12	Wau 6AB	6-4½x5¾	48.6	...	FP	Wau	Chi	Zen	G	A-L	A-L	D. B-L	B-L 70 Max	A	7	Cle	Tim66794-5DH	W	F	17.1	108.2	B†‡	Tim 17300	Ros	Opt	Opt	13000
Clinton 120SM	....	172	Opt	S 36x6	S 40x14	Bud BTU	4-5x6½	40.0	L	PC	Bud	Own	Zen	V	Spl	D-R	D. B-L	B-L 60	A	4	Blo	Tim 68702DHP	W	F	8.8	83.6	A*	Tim 17300	Ros	Opt	Opt	9500
Coleman F75	....	144	184	P 42x9	DP 42x9	Bud GL	6-4½x6	48.6	L	FP	Bud	Per	Str	V	D-R	D-R	D. Ful	Ful HU16	U	8	Spi	Wis HD	R	F	8.54	175.0	E	Wis HD	Ros	168	105	10400
Coleman F75S	....	144	184	P 42x9	DP 42x9	Bud GF	6-4¾x6	54.2	L	FP	Bud	Per	Str	V	D-R	D-R	D. Ful	Ful HU16	U	8	Spi	Wis HD	R	F	8.54	175.0	E	Wis HD	Ros	168	105	10400
Diamond T-2500	....	194°	....	S 36x7	DS36x12	WanRB	6-5x5¾	60.0	L	PC	Wan	G&O	Zen	G	Bos-A	A-L	D. B-L	B-L 70	A	7	Spi	Tim	W	F	9.67	91.8	G°	Tim	Ros	....	....	13000
*F.W.D. X6	6500	170	....	P 36x8	P 36x8	Wau	6-4¼x4¾	43.3	L	PC	Wau	Per	Zen	V	Eis	Non	O. H-S	Own	A	5	Blo	Own X	B	F	8.9	88.6	B	Own M	Ros	180	137	9500
Fageol 10-66	8500	229½	....	S 36x6	DS36x5	Wau AB	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55&60	U&A	7	Spi	Tim 65700	W	F	6.87	123.4	G°	Tim 17300	Ros	224½	158¾	12000
Fageol 645	5650	172°	205	S 36x6	DS40x7	Wau DU	4-4½x6¼	32.4	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 60	U&A	7	Spi	Tim 68700	W	F	10.33	55.2	B*	Tim 17300	Ros	168	101⅞	9750
Fageol 685	6400	172°	205	S 36x5	DS40x7	Wau AB	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Bos-R	D-R	D. B-L	B-L 55&60	U&A	7	Spi	Tim 68700	W	F	7.81	140.39	B*	Tim 17300	Ros	168	95¾	10400
*Federal X8	....	162	186	S 36x6	S 40x14	Con B7	4-5x6	40.0	L	FP	Pie	Own	Zen	V	Eis	D-R	P. B&B	B-L 60	A	7	Opt	Tim 68700DP	W	F	11.6	110.2	B	Own	Gem	151	87	9000
Gotfredson W104A	....	169	193	S 36x6	DS40x8	Bud BBU	4-5x6½	40.0	L	PC	Pie	Lon	Zen	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700SP	W	F	11.66	110.77	B	Tim 17302	Ros	....	....	12000
Gotfredson W106A	....	173	196 5/16	S 36x6	DS40x8	Bud GL6	6-4½x6	48.6	L	PC	Pie	McC	Zen	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700SP	W	F	10.0	95.0	B	Tim 17302	Ros	....	....	12400
Gramm 60	5370	153°	200	S 36x6	S 36x14	Her G	4-4¾x5¾	36.1	L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm 60	5370	153°	200	S 36x6	S 36x14	Lyc TS	6-3⅞x5	36.2	L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	82.0	B*	Wis 30	Ros	138	83¾	8700
Gramm Bernstein 50	....	168°	188	S 36x6	DS40x6	Con B7	4-5x6	40.0	L	PC	Pie	Own	Str	G	Eis	A-L	D. Ful	Ful H1	A	8	Own	Wis 1010F	W	F	11.75	125.7	B	Shu 610	Ros	162	97	9700
Guilder L 6-7	5650	170	....	S 36x6	S 40x14	Bud BTU	4-5x6½	40.0	L	PC	Pie	G&O	Zen	G	Eis	Non	D. B-L	B-L 60	A	4	M-E	Wis 1500	R	F	9.10	....	A*	Shu 650	Ros	....	....	9600
*Hahn N	....	162°	200	S 36x6	S 40x14	Con B5	4-4¾x6	36.1	L	FP	.....	Chi	Str	G	Bos-R	D-R	D. B-L	B-L	U	4	Spi	Tim 6760	W	F	10.25	....	...	Tim 1732	Ros	164	94	9200
*Hendrickson SSW	6100	Opt	Opt	P 36x8	P 36x8	Bud BA6	6-4⅛x5⅛	40.8	L	FP	Bud	Chi	Zen	V	Spl	A-L	D. B-L	B-L 60	A	7	Blo	Own	W	F	8.25	78.38	G‡	Tim 16302	Ros	Opt	Opt	8450
†Hendrickson MSW	6300	Opt	Opt	P 38x7	DP38x7	Bud BA6	6-4⅛x5⅛	48.6	L	FP	Bud	Chi	Zen	V	Spl	A-L	D. B-L	B-L 60	A	7	Blo	Own	W	F	Opt	....	G†‡	Tim 16302	Ros	Opt	Opt	10800
Hendrickson SW10	6900	Opt	Opt	S 36x7	S 40x12	Wau EU	4-5x6¼	40.0	L	FP	Wau	Chi	Zen	G	Spl	Bos-R†	D. B-L	B-L 70-	A	7	Blo	Own	W	F	10.25	96.35	G‡	Tim 17300	Ros	Opt	Opt	11700
Hendrickson SW610	7300	Opt	Opt	S 36x7	S 40x12	Bud GL6	6-4½x6	48.6	L	FP	Pha	Chi	Zen	V	Spl	Bos-R†	D. B-L	B-L 70	A	7	Blo	Own	W	F	10.25	96.35	G‡	Tim 17300	Ros	Opt	Opt	13000
Indiana 641-7	....	184°	208	S 36x6	S 40x12	Wis Z	6-4½x5	48.6	H	FP	K-P	Lon	Str	V	Eis	A-L‡	D. B-L	B-L 70 Max	A	7	Spi	Tim 68700SP	W	F	10.0	95.0	B*	Shu 610	Ros	156	98¼	10000
Kenworth 10 ton	5975	181	Opt	S 36x7	DS40x8	Wau GU	4-5⅜x6¼	46.2	L	FP	Non	Mod	Str	V	Bos-R	D-R	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700	W	F	10.0	95.0	B*	Tim 17300	Ros	Opt.	Opt.	10000
Le Moon H60	6200	192	192	S 36x6	S 36x8	Wau 6KU	6-4¼x4¾	43.3	...	FP	Wau	Chi	Str	V	A-L	A-L	D. B-L	B-L 60	A	7	Opt	Wis 4600	W	F	8.25	78.37	G	Tim 16302	Ros	162	105	10000
Le Moon H100	7300	180	180	S 36x7	S 40x12	Wau 6AB	6-4½x5¾	48.6	...	FP	Wau	Chi	Str	V	L-N	L-N	D. B-L	B-L 70	A	7	Spi	Tim 66791	W	F	9.66	90.8	G	Tim 17302	Ros	130	93	13000
Mack AC7½	6000	168°	....	S 36x7	DS40x7	Own AC	4-5x6	40.0	L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	10.5*	67.1	D*	Own AC	Own	....	....	....
Moreland ED6	4700	196	....	P 36x8	P 36x8	Her WXC	6-4x4½	38.4	L..	PC	Non	Lon	Zen	O	A-L	A-L	D. B-L	B-L 51	U	5	Cle	Own	W	F	8.75	52.2	G‡	Tim 16300	Ros	168	113	8500
Moreland H6	4990	196	....	S 36x5	S 36x10	Her YXC	6-4⅜x4¾	45.9	L	PC	Non	Lon	Zen	O	A-L	A-L	D. Own	B-L 55	A	7	Cle	Tim 66702W	W	F	8.66	82.33	A‡	Tim 16300	Ros	168	113	8000
Moreland HDS6	5800	220	....	S 36x6	S 36x8	Her YXC	6-4⅜x4¾	45.9	L	PC	Non	Lon	Zen	O	A-L	A-L	D. Own	B-L 60	A	7	Cle	Own	W	F	8.5	81.0	G‡	Tim 16300	Ros	196	137	10500
Moreland SD6	6950	221	....	S 36x7	S 36x10	Her YXC2	6-4½x4¾	48.6	L	PC	Non	Own	Zen	O	A-L	A-L	D. Own	B-L 60	A	7	Cle	Own	W	F	9.33	89.0	G‡	Tim 17300	Ros	216	135	11500
Moreland TD6	8600	221	....	S 36x7	S 36x10	Con 15H	6-4½x5¾	48.6	L	FP	Non	Own	Str	O	A-L	A-L	D. B-L	B-L 70	A	7	Cle	Own	W	F	10.33	98.5	G‡	Tim 17300	Ros	240	135	12500
Pierce-Arrow RF7½	5600	168	204	S 36x6‡	DS40x8	Own RF	4-4½x6¾	32.4	T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RF	A	4	Spi	Own RF	W	F	10.0	51.9	B*	Own RF	Own	139¼	84¾	9540
Saurer 5AD	6000	Opt	197	S 40x6‡	DS40x7‡	Own 5AD	4-4[illegible]x7[illegible]	29.3	L	PS	Own	Own	Own	G	Sci	Opt	K. Own	Own 5AD	U	4	Own	Own 5 AD	B	F	7.87	50.0	A*	Own 5AD	Own	142	104	7500
*Schacht Series 70	....	168	200	S 36x7	DS40x8	Wau SRL	6-4⅜x5⅛	45.9	L	FP	Han	Own	Zen	G	Bos-A	Non	D. B-L	B-L 70	A	7	Spi	Own	W	F	14.0	88.2	A‡	Own	Ros	152	82[illegible]	10600
Standard 5-7	....	165°	180	S 36x6	S 40x14	Con B5	4-4¾x6	36.1	L	FP	Sim	Lon	Str	V	Eis	Bos A‡	D. B-L	B-L 60	A	7	Spi	Tim 68700SP	W	F	6.86	83.6	A	Tim 17300	Ros	144	93[illegible]	8700
Sterling DC25-64-6	....	166	180	S 36x6	S 40x12	Own 6KU	6-4¼x4¾	43.3	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 55	U	4	Spi	Own	O	D	9.3	50.1	D*	Tim 16300	Ros	147	86	7680
Sterling EW27-44-6	....	174	192	S 36x6	S 40x14	Own EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	B-L 60	A	4	Spi	Tim 67700	W	F	8.	52.3	A*	Tim 17300	Ros	158	97	9525
Sterling EC29-66A-7½	....	174	218	S 36x6	S 40x14	wn EU	4-5x6¼	40.0	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	Own	A	6	Spi	Own	C	D	9.3	56.6	D*	Tim 17300	Ros	158	97¼	9750
Sterling EC29-66A-7½	....	182	218	S 36x6	S 40x14	Own 6AB	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Eis	L-N	D. B-L	Own	A	6	Spi	Own	C	D	10.5	64.0	D*	Tim 17300	Ros	158	97¼	10380
United 100	....	151	....	S 36x6	S 40x14	Her G.	4-4¾x5¾	36.1	L	PC	Pie	Per	Zen	G	Eis	A-L	D. B-L	B-L 60	A	4	Blo	Wis 1800	R	F	11.2	106.4	A*	Shu 610	Ros	....	....	8900
U. S. T.	4500	172°	186	S 36x6	DS40x6	Bud BTU	4-5x6½	40.0	L	PC	Sim	Own	Str	V	Eis	A-L	D. B-L	B-L 60	A	4	Blo	Tim 68700S	W	½	10.2	54.8	B‡	Shu 655	Lav	168	103	9700
Walter FHR	7600	Opt	172	S 40x8	DS40x8	Own 6	6-4½x5¾	48.6	L	PC	Own	Own	Zen	V	Eis	D-R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	10000
Ward La France 7B	....	Opt	....	S 36x6	DS40x7	Wau GU	4-5⅝x6¼	50.6	L	PC	Wau	Own	Str	G	Bos-R	A-L‡	D. B-L	B-L 60 Max	A	7	Spi	Tim Spec.	W	F	8.8	83.6	A‡	Tim	Ros	....	....	9505
Ward La France 7B6	....	Opt	....	S 36x7	DS40x8	Wau 6AL	6-4½x5¾	48.6	L	PC	Wau	Own	Zen	V	Bos-R	A-L‡	D. B-L	B-L 60 Max	A	7	Spi	Tim Spec.	W	F	8.8	83.6	B‡	Tim	Ros	....	....	9570
*White 52	5100	174°	245	S 36x6	S 40x12	Own GRB-1	4-4¼x5¾	28.9	L	FP	Own	Own	Own	V	......	L-N‡	P. Own	Own	U	5	Spi	Own	R	F	11.7	92.3	B*	Own	Own	166⅛	105⅝	9184
Witt-Will AS	....	172°	220	S 36x6	S 40x14	Con B5	4-4¾x6	36.1	L	FP	Non	Own	Zen	G	Eis	Bos-A	D. B-L	B-L 60 Max	A	7	Spi	Tim 68700	W	F	10.25	......	A*	Tim 1732B	Ros	139	89	9500

Gasoline Tractor-Trucks

Amer. La France 5 Ton	3950	131	131	S 36x5	S 36x10	Own 2R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 2R	A	4	Own	Own 2R	R	F	7.57	40.8	B*	Own 2R	.....	95⅝	63⅝	6400
Amer. La France 7 Ton	4950	133	133	S 36x6	DS36x6	Own 3R	4-4¼x6	28.9	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 3R	A	4	Own	Own 5R	W	F	8.8	47.8	B*	Own 3R	.....	96¾	66¼	8400
Amer. La France 10 Ton	5500	133	133	S 36x6	DS40x6	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	.....	96¾	66¼	9400
Amer. La France 13 Ton	5750	133	133	S 36x7	DS40x7	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	10.0	54.4	B*	Own 5R	.....	96¾	66¼	9500
Amer. La France 15 Ton	6000	133	133	S 36x7	DS40x8	Own 5R	4-4¾x6	36.1	L	PS	Own	Bus	Zen	V	Bos-A	Bos A‡	D. Own	Own 5R	A	4	Own	Own 5R	W	F	11.67	63.5	B*	Own 5R	.....	96¾	66¼	9700
Armleder 30	....	115	....	S 34x4	S 34x6	Her OX	4-4x5	25.6	L	PC	Non	Lon	Zen	V	A-L	A-L	D. B-L	B-L 35	U	4	Spi	Tim	W	½	8.8	47.8	A	Tim	Ros	.....	.....	4100
Armleder 50	....	116	....	S 36x4	S 36x8	Bud EBU-I	4-4¼x5½	28.9	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 51	U	4	Spi	Tim	W	F	9.25	49.5	A	Tim	Ros	.....	.....	5100
Armleder 70	....	119	....	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4	L	PC	Han	Lon	Zen	V	A-L	A-L	D. B-L	B-L 55	U	4	Spi	Tim	W	F	12.0	64.2	A	Tim	Ros	.....	.....	7000

Gasoline Tractor-Trucks—Cont'd

Autocar HT	3750	97	137	P 34x5	P 36x10	Own*	4-4½x5½	32.4L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	8.5	53.9	A	Own J	Ros	89¾	59	5800
Autocar SHT	4000	102	137	P 34x5	P 36x10	Own*	6-4⅛x4¾	40.8L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own H	R	F	8.5	53.9	A	Own J	Ros	94¾	64	5800
Autocar HST	4100	99	137	P 34x6	P 36x12	Own*	4-4½x5½	32.4L	SP	Pha	Own	Str	V	Bos-A	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	9.89	62.7	A	Own J	Ros	91¾	61	6900
Autocar SHST	4400	104	137	P 34x6	P 36x12	Own*	6-4⅜x4¾	45.9L	PC	Han	Own	Str	V	Bos-R	L-N	P. Lon	Own T	U	4	Spi	Own J	R	F	9.89	62.7	A	Own J	Ros	96¾	66	7000
Federal LD	....	121	.....	S 36x4	DS36x4	Con K4	4-4⅛x5¼	27.2L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Pet	Tim 65600SP	W	F	8.50	80.75	B	Own	Gem	92	59	5000
Federal HD	....	135	.....	S 36x5	DS36x5	Con L4	4-4½x5½	32.4L	FP	Pie	Lon	Zen	V	Eis	D-R	P. B&B	B-L 55	A	7	Pet	Tim 66700SP	W	F	9.5	90.75	B	Tim 1632B	Gem	96	59	6700
General Motors K-10T	....	111¼	.....	S 36x5	S 36x12	G.M.C. 89	4-4½x6½	32.4L	FP	K.P.	McC	Mar	V	Eis	D-R	D. Own	Own	U	7	Own	Tim 66600	W	F	10.33	81.01	A‡	Tim 16380	Own	.....	.....	7677
General Motors K-15T	....	111¼	.....	S 36x5	S 36x14	G.MC. 89	4-4½x6½	32.4L	FP	K.P.	McC	Mar	V	Eis	D-R	D. Own	Own	U	7	Own	Tim 67600	W	F	11.65	91.46	A‡	Tim 16380	Own	.....	.....	8477
Gramm 35-6 ton	4160	153°	200	S 36x5‡	S 36x10‡	Her L	4-4½x5¾	32.4L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 35-6 ton	4160	153°	200	S 36x5‡	S 36x10	Lyc TS	6-3⅞x5	36.2L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 8800	R	F	6.33	70.0	B*	Wis 30	Ros	138	83¾	7100
Gramm 45-10 ton	4735	153°	200	S 36x5‡	S 36x12‡	Her L	4-4½x5¾	32.4L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 45-10 ton	4735	153°	200	S 36x5‡	S 36x12‡	Lyc TS	6-3⅞x5	36.2L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1450	R	F	7.08	79.0	B*	Wis 30	Ros	138	83¾	7600
Gramm 60-15 ton	5370	153°	200	S 36x6	S 36x14	Her G	4-4¾x5¾	36.1L	PC	Pie	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	133.4	B*	Wis 30	Ros	138	83¾	8700
Gramm 60-15 ton	5370	153°	200	S 36x6	S 36x14	Lyc TS	6-3⅞x5	36.2L	FP	Han	Own	Zen	V	A-L	A-L	D. Ful	Ful H	A	8	Blo	Wis 1700	R	F	7.33	133.4	B*	Wis 30	Ros	138	83¾	8700
Harvey WTT 6 ton	3500	125	125	S 36x5	S 36x10	Bud EBU-I	4-4¼x5½	28.9L	PC	McC	Own	Str	G	Bos-R	Non	D. B-L	B-L 55	A	7	Spi	Tim 65700	W	F	10.5	99.75	A*	Tim 15300	Ros	82	52	6950
Harvey WHT 10 ton	4250	125	130	S 36x6	S 36x12	Bud YBU-I	4-4½x6	32.4L	PC	McC	Own	Str	G	Bos-R	Non	D. B-L	B-L 60	A	7	Spi	Tim 66600	W	F	10.3	98.15	A*	Tim 16300	Ros	87¾	55¾	8900
Int. Harvester 54C	....	122	122	S 36x5	S 36x10	Own	4-4¼x5	28.9H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own	C	D	8.15	48.0	B*	Own	Own	78	49	6000
Int. Harvester 74C	...	137	137	S 36x6	S 36x12	Own	4-4¼x5	28.9H	SP	Own	Own	Zen	G	Bos-R	D-R*	D. Own	Own	U	4	Own	Own *	C	D	10.6	86.0	B*	Own	Own	92	64	8315
Int. Harvester HS-54	....	130	200	S 36x5	S 36x8	HaS 151	4-4¼x5½	28.9H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 54-65000	R	F	6.85	60.49	E*	Eat 54F	Own	88½	55¼	7675
Int. Harvester HS-54-C	....	130	200	S 36x5	S 36x10	HaS 151	4-4¼x5½	28.9H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	7.22	63.75	E*	Eat 54F	Own	84 7/16	55¼	7900
Int. Harvester HS-74	....	144	235	S 36x6	S 40x12	HaS 152	4-4¾x5½	36.1H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Eat 74-100000	R	F	7.85	70.49	E*	Eat 74F	Own	101	65⅞	9530
Int. Harvester HS-74-C	....	146	235	S 36x6	S 40x12	HaS 152	4-4¾x5½	36.1H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	8.81	79.11	E*	Eat 74F	Own	95⅞	67⅝	9955
Int. Harvester HS-104-C	....	146	235	S 36x6	S 40x14	HaS 152	4-4¾x5½	36.1H	PC	HaS	Own	Zen	G	Bos-R	D-R*	P. Own	Own	U	5	Own	Own	C	D	10.08	90.52	E*	Eat 74F	Own	95⅞	67⅝	10425
Mack AB 5-6 Ton	3400	122½	.....	S 36x4	DS36x4	Own AB	4-4¼x5	28.9L	PS	Own	Own	Str	G	Spl	N-E‡	D. Own	Own AB	U	4	Spi	Own AB	C	D	10.5*	51.1*	B*	Own AB	Own	.....	.....	.....
Mack AC 7-10 Ton	4950	128	.....	S 34x5	DS36x5	Own AC	4-5x6	40.0L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	9.1	58.0*	D*	Own AC	Own	.....	.....	.....
Mack AC 11-14 Ton	5500	128	.....	S 34x6	DS36x6	Own AC	4-5x6	40.0L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	9.7	62.2*	D*	Own AC	Own	.....	.....	.....
Mack AC 15 Ton	6000	128	.....	S 34x7	DS36x7	Own AC	4-5x6	40.0L	PS	Own	Own	Str	G	Spl	N-E‡	P. Own	Own AC	J	4	Spi	Own AC	C	D	11.5	73.5*	D*	Own AC	Own	.....	.....	.....
Pierce-Arrow XB	3750	140	140	S 36x5	S 36x5	Own XB	4-4x5½	25.6T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own XB	A	4	Spi	Own XB	W	½	9.25	50.2	A*	Own	Own	99 7/16	70 15/16	6180
†Oneida SFF-10	....	Opt	.....	P 36x8	P 36x8	Wau 6KU	6-4¼x4¾	43.3L	PC	Wau	Per	Str	V	A-L	A-L	B-L	B-L 60	A	7	Blo	Wis 7500	W	F	8.25	78.38	G*	Tim 16302	Ros	Opt	Opt	10025
†Oneida SFF-15	....	Opt	.....	P 38x9	P 38x9	Wau 6AB	6-4½x4¾	48.8L	PC	Wau	Per	Str	V	A-L	A-L	B-L	B-L 60	A	7	Blo	Wis 8000	W	F	10.25	96.35	G*	Tim 16302	Ros	Opt	Opt	10550
Pierce Arrow RD	5400	133	133	S 36x6	S 36x6	Own RD	4-4½x6¾	32.4T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RD	A	4	Spi	Own RD	W	F	7.8	41.5	B*	Own	Own	92¼	63¾	8650
Pierce-Arrow RF	5600	132	132	S 36x6	S 36x7	Own RF	4-4½x6¾	32.4T	FP	Own	Own	Str	P	D-R	D-R	D. Own	Own RF	A	4	Spi	Own RF	W	F	10.0	51.9	B*	Own	Own	92¼	63¾	9340
Saurer	6000	Opt	142	S 40x6	DS40x7	Own	4-4 21/32x3 3/32	29.3L	PS	Own	Own	Own	G	Sci	Opt	K. Own	Own	U	4	Own	Own	B	F	7.87	50.	B	Own	Own	104	68	7500
Schacht 5 Ton	....	130	.....	S 34x5	S 34x10	Wau XK	6-3¾x4½	33.7L	PC	......	Own	Zen	G	L-N	L-N	D. Ful	Ful	U	4	Spi	Own	R	F	9.42	45.22	G	Own	Ros	.....	.....	6200
Schacht 7 Ton	....	130	.....	S 36x5	S 36x12	Wau KU	6-4¼x4¾	45.9L	PC	......	Own	Zen	G	Bos-A	Non	D. B-L	Ful	U	4	Spi	Own	R	F	10.3	65.0	B	Own	Own	.....	.....	7500
Schacht 13 Ton	....	130	.....	S 36x6	DS40x7	Wau SRL	6-4⅜x5⅛	45.9L	PC	......	Own	Zen	G	Bos-A	Non	D. B-L	B-L	U	7	Spi	Own	W	F	14.0	88.2	B	Own	Ros	.....	.....	10000
Schacht 15 Ton	....	130	.....	S 36x7	DS40x8	Wau SRL	6-4⅜x5⅛	45.9L	PC	......	Own	Zen	G	Bos-A	Non	D. B-L	B-L	U	7	Spi	Own	W	F	14.0	88.2	B	Own	Ros	.....	.....	10600
Walter FK	6100	Opt	118	P 40x8	P 40x8	Own 6	6-4¼x4¾	48.4L	PC	Own	Own	Zen	V	Eis	D-R	. Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	108	78	7500
Walter FH	7600	Opt	136	P 40x8	DP40x8	Own 6	6-4½x5¾	48.6L	PC	Own	Own	Zen	V	Eis	D-R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	9000
Walter FHR	7600	Opt	172	S 40x8	DS40x8	Own 6	6-4½x5¾	48.6L	PC	Own	Own	Zen	V	Eis	D.R	Own	Own	U	5	Own	Own	R	D	8.50	85.0	E*	Own	Ros	126	96	10000
*White 52T	4700	129½	129½	S 36x5‡	DS40x5	Own GRB-1	4-4¼x5¾	28.9L	FP	Own	Own	Zen	V	......	L-N‡	P. Own	Own 4B	U	4	Spi	Own	R	F	11.7	76.5	B*	Own	Own	94⅝	62⅝	8236
*White 51A	3875	134	134	S 36x5‡	S 36x8‡	Own GRB-1	4-4¼x5¾	28.9L	FP	Own	Own	Zen	V	......	L-N‡	P. Own	Own 4B	U	4	Spi	Own	S	½	7.14	46.7	B*	Own	Own	80	48½	.6045

Motor Bus Chassis Specifications

Key of abbreviations, page 78

MAKE AND MODEL	GENERAL					ENGINE				ELECTRICAL SYSTEM				Normal Speed		TRANSMISSION				REAR AXLE			FRONT AXLE		TIRES AND WHEELS				DIMENSIONS (In.)		
		WEIGHT										BATTERY				CLUTCH	GEARSET								TIRES (In.)					OVERALL	
	Seating Capacity	Chassis Only	Chassis with Body	Recommended Body Allowance	Wheelbase	Make and Model	Number of Cylinders, Bore and Stroke	Radiator Make	Carburetor Make	Ignition System Make	Generator and Starter Make	Make	Voltage and Amp. Hr. Cap.	High M. P. H.	Low M. P. H.	Type and Make	Make and Model	Number of Forward Speeds	Universal Make	Make and Model	Final Drive	Brake Location	Make and Model	Steering Gear Make	Front	Rear	Wheels—Make	Turning Radius (Ft.)	Floor Height	Length	Width
A.C.F. 508	30	....	....	....	230	Ha S	6-4¼x5½	......	Zen	D-R	D-R	Opt	12-180	...	.....	P. B-L	B-L 55	4	Spi	Tim 65252	W	E°	Tim 1660	Ros	P 38x7	DP38x7	Bud	37	22	338¾	96
A.C.F. 519 (gas..elec.)	60	....	....	....	230	Ha S	6-4¼x5½	......	Zen	D-R	D-R	Opt	12-180	...	.....	.....	.....	....	Spi	Tim 6535	W	E°	Tim 1660	Res	P 36x8	DP36x8	Bud	37	22	338¾	96
*A.C.F. 601	23	....	....	....	198	Ha S	6-3¾x5	......	Zen	D-R	D-R	Opt	12-115	...	.....	D. B-L	B-L 55	4	Spi	Tim 65011	W	E*	Tim 15705	Ros	P 34x7½	DP34x7½	Bud	33	24	301	91½
*Acme 116	18	4910	8460	....	180	Con 6B	6-3¾x5	Per	Zen	Eis	Bos-A	Wil	6-153	40	.....	D. B-L	B-L 51	4	Blo	Wis 67410	R	A*	Shu	Ros	P 32x6	DP32x6	Mot	....	21¾	259	83¾
*Acme 112	22	5110	9280	....	205	Con 7T	6-4⅛x5¼	Per	Str	Eis	Bos-A	Wil	6-153	45	.....	D. B-L	B-L 55	4	Blo	Wis	B	A*	Shu	Ros	P 36x6	DP32x6	Mot	....	21¾	276	83¾

*Brockway JB	16	3200	4700	1500	142	Wis C	4–3¾x5	G&O	Zen	A-L	A-L	Exi	6–153	38	5.0	P. B&B	B-L 20	3	Spi	Col 55001	S	G*	Col 3204	Ros	P 32x6	P 32x6	Mel	25	31½	203	67¼
Brockway EB	20	3975	6350	2500	153°	Wis SU	4–4x5	G&O	Zen	L-N	L-N	Exi	12–220	40	7.0	D. B-L	B-L 30	3	Spi	Col 55001	S	G*	Col 5403	Ros	P 32x6	P 34x7	Mel	28	28½	243	64
Brockway EB4	20	4150	6400	2500	154°	Wis Y	6–3⅜x5	G&O	Zen	L-N	L-N	Exi	12–220	30	8.5	D. B-L	B-L 55	4	Spi	Wis 68310	R	G*	Shu 5550B	Ros	P 32x6	DP32x6	Bud	30	26½	256	74
Brockway H	26	6450	7975	3000	182°	Wis H	6–4x5	G&O	Zen	L-N	L-N	Exi	6–153	38	5.0	P. B&B	B-L 20	3	Spi	Col 55001	S	G*	Col 3205	Ros	P 32x6	P 32x6	Mel	25	31½	213	67¼
*Brockway JBF	16	3450	4700	1500	149	Wis F	6–3¼x4¼	G&O	Zen	A-L	A-L	Exi	6–153	38	5.0	P. B&B	B-L 20	3	Spi	Wis 4610	R	G*	Col 5403	Ros	P 32x6	DP32x6	Bud	32	28½	263	68
Brockway SW	24	4820	6450	2500	173°	Wis Y	6–3⅜x5	G&O	Zen	L-N	L-N	Exi	12–220	38	.....	D. B-L	B-L 35	4	Spi	Tim 65920	I	B‡	Shu 610B	Ros	P 34x7	DP34x7	Bud	32	26	344¾	90
Brockway JI	32	7680	11000	5000	221°	Wis H	6–4x5	G&O	Zen	L-N	L-N	Exi	12–220	30	6.0	D. B-L	B-L 55	4	Spi	Tim 52000H	S	G	Tim 11703H	Ros	B32x6.75	B32x6.75	.....	26	27	240	72
Corbitt SB-620	15	3350	5100	1750	138	Con 18E	6–3⅜x4	Per	Str	D-R	D-R	Pol	6–150	50	5.0	D. B-L	B-L 20	4	Spi	Tim 54000H	S	G	Tim 12703H	Ros	B34x7.50	B34x7.50	.....	30	28	253½	74⅛
Corbitt SB630	18	3850	.....	.....	150	Con 16C	6–3⅜x4⅝	Per	Zen	D-R	D-R	Pol	6–150	50	7.0	D. B-L	B-L 35	4	Spi	Tim 63103H	W	G	Tim 14703H	Ros	P 32x6	DP34x6	.....	30	28	.....	.....
Corbitt SB-646	21	.....	.....	.....	Opt	Con 16C	6–3⅜x4⅝	Per	Zen	D-R	D-R	Pol	6–150	40	7.0	D. B-L	B-L 35	4	Spi	Tim 65711D	W	A	Shu 610B	Ros	P 36x6	DP36x6	Bud	27	29	317	80
Day-Elder 30	30	7300	11300	4000	220	Bud BA6	6–4½x5½	Bus	Zen	L-N	L-N	USL	12–148	35	7.0	D. B-L	B-L 55	4	Spl	Cla 3D	I	A	Shu 610B	Ros	P 36x6	DP36x6	Bud	34	21	274	91
Denby 36	30	7000	10500	3500	216	Con 6B	6–3¾x5	Lon	Zen	Bos-R	Bos-R	Wil	12–153	30	.....	D. Ful	Ful GU14	4	Blo	Wis 67500	R	A	Shu	Ros	P 32x6	P 34x7	Day	29	25	276½	71
Dodge Brothers JE	16	4045	6945	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	28	27	256	77
Dodge BrothersJER	16	4075	6975	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	B32x6.75	B32x6.75	Bud	28	27	256	77
Dodge BrothersJEB	16	4075	6975	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	40	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	29	27½	256	77
Dodge BrothersJEX	16	4255	7155	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	35	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	P 34x7	Cla	30	28½	261	86
Dodge Brothers YE	21	4205	7460	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	35	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Bud	29	27½	261	86
Dodge Brothers YEX	21	4415	7670	3000	165	Own	6–3⅜x4½	Fed	Zen	N-E	N-E	Wil	6–215	35	.....	P. B&B	Own	4	U-P	Own	S	G†	Own	Han	P 32x6	DP32x6	Van	.....	24	288	90
Douglas	21	5700	9150	3450	182	Bud DW6	6–3¾x5	Chi	Zen	L-N	L-N	Exi	12–117	.....	.....	D. Ful	Ful	4	Blo	Wis 67500	R	A	Shu	Ros	S 36x5	DS36x6	Own	26½	25	296	90
*Fageol 503 (Kent)	29	.....	.....	.....	230	Ha S	6–4¼x5½	.....	Zen	D-R	D-R	Opt	12–180	.....	.....	D. B-L	B-L	4	Spi	Tim 65190	W	E	Tim 1660	Ros	P 36x6	P 36x6	Bud	.....	.....	.....	.....
Fageol Parlor Car	26	.....	.....	.....	230	Wau	6–4½x5¾	Own	Zen	Bos-R	D-R	USL	12–118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	B°	Tim 1560	Ros	P 36x6	DP36x6	Bud	38½	20¾	342	89
Fageol Street Car	29	.....	.....	.....	233	Wau	6–4½x5¾	Own	Zen	Bos-R	D-R	USL	12–118	35	7.0	D. B-L	B-L 55	4	Spi	Tim 65190	W	B°	Tim 1560	Ros	P 36x6	DP36x6	Bud	38	22½	339	89
Fageol Dbl. Deck	58	.....	.....	.....	233	Wau	6–4½x5¾	Own	Zen	Bos-R	D-R	USL	12–118	35	8.0	D. B-L	B-L 55	4	Spi	Tim 6521	W	B°	Tim 1660	Ros	P 36x8	DP36x8	Bud	45½	21	360½	93½
Fageol Dbl. Deck	58	.....	.....	.....	233	Wau	6–4½x5¾	Own	Zen	Eis	N-E	Exi	12–120	30	7.5	P. Own	Own J	4	She	Tim 6412	W	A	Tim 1523	Ros	P 32x6	DP32x6	Bud	30½	27⅝	277	87½
Fifth Ave. J	25	5850	8530	2780	172	Yell EZ	4–4x6	Own	Zen	Eis	N-E	Exi	12–150	27	5.0	Yell	Own L	4	Spi	Own L	I	B	Own L	Ros	S 36x5	DS36x6	Own	26½	25	296	90
Fifth Ave. L	55	6850	12040	5190	174¾	Yell EZ	4–4x6	Own	Zen	Eis	N-E	Exi	12–150	27	5.0	Yell	Own L	4	Spi	Own L	I	B	Own L	Ros	S 36x5	DS36x6	Own	26½	25	296	90
Garford KB	21	4400	11500	3000	180	Wis Y	6–3⅜x5	Lon	Zen	A-L	A-L	Wil	6–135	35	7.3	D. B-L	B-L 31	3	B.G.	Tim 5620H	B	E	Tim 1473H	Han	P 36x6	P 34x7	Day	29	25	276½	71
Garford CB	29	6900	11300	4400	220	Wis Z	6–4½x5	Lon	Zen	Spl	L-N	Wil	12–153	57	11.9	D. B-L	B-L 608	4	Spi	Tim 6522W	W	E	Tim 1660W	Ros	P 32x6	DP32x6	Bud	35	23	.....	.....
Gramm 363N	15	3100	5100	2000	164°	Lyc S	6–3¼x4½	Own	Zen	A-L	A-L	USL	6–135	40	.....	D. Ful	Ful KU	3	Blo	Eat 1002	B	B*	Col 5330	Ros	P 30x5	P 32x6	Van	.....	.....	.....	.....
Gramm RA	17	5500	8500	3000	184	Lyc TS	6–3⅞x5	Own	Zen	DJ	DJ	Wil	6–215	40	.....	D. Ful	Ful GU	4	Blo	Wis 4650	B	E	Col 5409	Ros	P 32x6	DP32x6	Bud	30	21	255	82
Gramm 30	21	6200	9200	3000	210	Bud BA-6	6–4½x5½	Own	Zen	L-N	L-N	USL	12–100	40	.....	D. Ful	Ful RU	4	Blo	Wis 6647B	R	E	Shu 5550	Ros	P 34x7	DP34x7	Bud	32	21	299	82
Gramm 31	25	6500	9500	3000	236	Bud BA-6	6–4½x5½	Own	Zen	L-N	L-N	USL	12–100	40	.....	D. Ful	Ful RU	4	Blo	Wis 6647B	R	E	Shu 5550	Ros	P 34x7	DP34x7	Bud	35	21	325	82
Guilder 20	17	3650	.....	.....	152	Bud HS6	6–3⅜x4½	G&O	Zen	D-R	D-R	Wil	6–	.....	.....	D. B-L	B-L 31	3	Spi	Cla 504	B	A*	Shu 5410	Ros	P 32x6	DP32x6	Bud	.....	25	.....	.....
Guilder 26	21	.....	.....	.....	180	Bud DW6	6–3¾x5	G&O	Zen	D-R	D-R	Wil	6–	.....	.....	D. B-L	B-L 31	3	Spi	Wis 4700	R	A*	Shu 5410	Ros	P 32x6	DP32x6	Bud	.....	26	.....	.....
Guilder 35	25	.....	.....	.....	204	Bud DW6	6–3¾x5	G&O	Zen	D-R	D-R	Wil	6–	.....	.....	D. B-L	B-L 51	4	Spi	Wis 67500	R	A‡	Shu 5550B	Ros	P 32x6	DP32x6	Bud	.....	26	.....	.....
Guilder 36	25	6000	.....	.....	204	Bud BA6	6–4½x5½	G&O	Zen	N-E	N-E	Wil	12–	45	5.0	D. B-L	B-L 51	4	Spi	Wis 1261K	R	A‡	Shu 610B	Ros	P 36x6	DP36x6	Bud	36	26	312	92
Hahn KB	27	4900	8400	.....	198	Con 6B	6–3¾x5	Chi	Seh	Bos-R	L-N	Wil	12–220	...	5.0	D. B-L	B-L	4	Spi	Wis 6730	R	A	Shu 5550B	Ros	S 32x6	DP32x6	Bud	.....	27	Opt	Opt
Hahn LB	35	6800	10300	.....	245	Con 14H	6–4¼x5¾	Chi	Sch	Bos-R	L-N	Wil	12–220	...	5.0	D. B-L	B-L 60	4	Spi	Tim 6530	R	A	Shu 5550B	Ros	S 34x7	DP34x7	Bud	.....	28	Opt	Opt
Hahn OB	20	4700	7500	.....	144	Her OX	4–4x5	Chi	Str	Bos-R	L-N	Wil	6–110	...	7.0	D. B-L	B-L	3	Spi	Wis 6736	R	A	Wis 11A	Ros	S 32x6	S 32x6	Bud	.....	25	Opt	Opt
Int. Harvester 15	16	4125	.....	2500	160	Lyc 4SL	6–3¼x4½	Lon	Zen	Dyn	Dyn	Pol	12–100	40	7.0	P Lon	Own	3	M.M.	Eat	B	A*	Eat	CAS	B32x6.75	B32x6.75	Bud	29	24	259	77
Kenworth BU21	21	6100	.....	3500	203	Bud BA6	6–4½x5½	Bus	Zen	Bos-R	L-N	Gor	6–150	45	.....	D. B-L	B-L 51	4	Spi	Tim 6522OS	W	B*	Tim 1660	Ros	P 34x7	DP34x7	Bud	40	25	364	72
Kenworth BU20	21	7000	.....	4500	244	Bud GL6	6–4½x6	Bus	Zen	Bos-R	L-N	Gor	6–150	45	.....	D. B-L	B-L 51	4	Spi	Tim 5620H	B	E	Tim 2341H	Ros	P 32x6	P 34x7	Bud	.....	24	248	.....
Kissel	21	.....	7725	2400	182	Own CB6	6–3¾x5½	Fed	Sch	D-R	D-R	Wil	6–240	45	.....	P. B&B	W-G	3	Spi	Tim 5620H	B	E	Tim 2341H	Ros	P 32x6	DP32x7	Bud	37	25	220	84
Larrabee XH31	21	5600	9000	3400	190	Con 6B	6–3¾x5	Fed	Zen	D-R	D-R	Exi	12–120	45	5.0	D. B-L	B-L 51	4	Spi	Wis 67300	R	A	Shu 5550B	Ros	P 32x6	DP32x7	Bud	.....	27	Opt	Opt
Mack AB City Type	25	7200	10450	3250	196	Own AB	4–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	D. Own	Own AB	4	Spi	Own AB	R	B‡	Own AB	Own	Opt*	Opt*	Bud	27½	25⅝	311	39½
Mack AB City Type	29	7300	11250	3950	225	Own AB	4–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	D. Own	Own AB	4	Spi	Own AB	R	B‡	Own AB	Own	Opt*	Opt*	Bud	31	25⅝	340¼	89½
Mack AB Par. Car	25	7340	11065	3725	230½	Own AB	4–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	. Non	Non	....	Spi	Own AB	R	B‡	Own AB	Own	S 34x7*	DS34x7	Bud	29	25⅝	311	89½
Mack AB (gas.-elec.)	25	8385	11655	3270	196	Own AB	4–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	. Non	Non	....	Spi	Own AB	R	B‡	Own AB	Own	S 34x7*	DS34x7*	Bud	32	25⅝	340¼	89½
Mack AB (gas.-elec.)	29	8545	12425	3880	225	Own AB	4–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	P. Own	Own AL	4	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	351⅞	89½
Mack AL City Type	29	9000	12880	3880	233	Own AL	6–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	P. Own	Own AL	4	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	354¾	91⅛
Mack AL Par. Car	29	9000	13700	4700	233	Own AL	6–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	P. Own	Own AL	4	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	251⅞	89½
Mack AL (gas.-elec.)	29	11520	15400	3880	233	Own AL	6–4¼x5	Own	Str	Spl	N-E‡	Exi	12–110	.....	.....	. Non	Non	....	Spi	Own AL	R	B‡	Own AL	Own	S 34x7*	DS34x7*	Bud	34	28	251⅞	89½
Menominee T	16	5600	8800	3200	176	Wis Y	6–3¾x5	Per	Zen	D-R	D-R	Wil	6–170	38	10	P. B&B	Cot AU	4	Pic	Wis	R	B	Shu 5550	Ros	P 32x6	DP32x6	Bud	28	26	262	77½
Menominee T	21	6350	10350	4000	201	Wis HB	6–3¾x5	Per	Zen	D-R	D-R	Wil	6–170	38	7	P. B&B	Cot AU	4	Pic	Wis	R	B	Shu 5550	Ros	P 34x7	DP34x7	Bud	28	26	292	87
Pierce-Arrow Z	25	6240	9100	3000	196	Own	6–4x5½	Own	Own	D-R	D-R	Wil	12–132	50	3.0	. Own	Own	4	Spi	Own	W	B‡	Own	Own	P 30x6	DP36x6	Bud	37½	28	282	89⅛
Pierce-Arrow Z	30	6350	9700	3500	220	Own	6–4x5½	Own	Own	D-R	D-R	Wil	12–132	50	3.0	. Own	Own 55	4	Spi	Own	W	B‡	Own	Own	P 36x6	DP36x6	Bud	40	28	303	89⅛
*Rehberger B4	29	7000	10500	3500	224	Bud BA6	6–4½x5½	Bus	Zen	Eis	L-N	Wil	12–132	40	7.0	D. B-L	B-L 55	4	Spi	Tim 65704D	W	B	Shu 610B	Ros	P 36x6	DP36x6	Bud	33	30	326	90
Reo FB	12	.....	.....	.....	156	Own	6–3⅝x5	Own	Sch	D-R	D-R	Wil	6–240	.....	.....	D. B-L	Own	4	Pet	Own	S	E†	Own	Han	B32x6.75	B36x8.25	Van	.....	.....	.....	.....
Reo GB	21	4790	.....	3500	179	Own	6–3⅝x5	Own	Sch	D-R	D-R	Wil	6–240	.....	.....	D. B-L	Own	4	Pet	Own	S	E†	Own	Han	B34x7.50	DB34x7.5	Van	29½	.....	.....	.....
Schacht 60	25	7800	.....	4000	205°	Wau KU	6–4¼x4¾	Own	Zen	L-N	L-N	Exi	6–120	50	.....	D. B-L	B-L	7	Spi	Wis 1250K	R	A‡	Own	Ros	P 38x7	DP38x7	Bud	33	28	291½	84
Selden Pacemaker	18	4075	.....	2000	185°	Con 15C	6–3⅜x4⅜	Own	Str	N-E	N-E	Exi	12–153	50	5.0	D. B-L	B-L 31	3	Blo	Cla 501	B	....	Shu	Ros	S 32x6	S 32x6	Van	.....	24	Opt	Opt
Selden Roadmaster	25	5650	.....	3000	210°	Con 6B	6–3¾x5	Own	Str	N-E	N-E	Exi	12–150	50	5.0	. B-L	B-L 51	4	Blo	Cla 720	...	....	Tim	Ros	S 32x6	DP24x7	Van	.....	24	.....	.....
Studebaker 75	21	5290	8260	3150	184	Own	6–3⅞x5	Lon	B.B.	D-R	D-R	Wil	12–108	55	5.0	D. Lon	Ful	4	Spi	Eat	S	G*	Eat	Ros	B32x6.75	B 32x6.75	Van	30	26¾	250⅛	78½
Studebaker 75 Jr	14	4600	7330	2730	158	Own	6–3⅞x5	Lon	B.B.	D-R	D-R	Wil	12–108	55	5.0	D. Lon	Ful	3	Spi	Eat	S	G*	Eat	Ros	B32x6.75	B 32x6.75	Van	34	24	289	92
Studebaker 76 Spec	22	4765	7895	3130	184	Own	6–3⅞x5	Lon	B.B.	D-R	D-R	Wil	12–108	55	5.0	D. Lon	Ful	3	Spi	Eat	S	G*	Eat	Ros	B32x6.75	B 32x6.75	Van	34	24	289	92
Twin Coach	40	.....	15500	....	194	Own	6–3¾x4½‡	Lon	Zen	D-R	D-R	Exi	12–150	50	5.0	D. B-L	B-L ‡	3	Pet	Tim	W	E°	Tim	Ros	P40x10½	DP38x7	Day	33	26	360	96
Ward La France 3B	25	6300	9700	3400	Opt	Wau DU	6–4½x6¼	Bus	Str	Bos-R	Bos-R	Wil	12–132	35	.....	D. B-L	B-L 55	4	Spi	Tim	W	A	She	Ros	P 36x6	DP36x6	Bud	36	28	304	75½
Ward La France 4B6	25	6600	.....	....	Opt	Wau 6QL	6–4x5⅝	.....	Str	Bos-R	Bos-R	Pol	12–174	.....	.....	D. B-L	B-L	4	Spi	Tim	W	....	Shu	Ros	P 34x7	DP34x7	Bud	.....	.....	.....	.....
†Whitcomb	25	6000	9700	....	216	Wis Z	6–4½x5	Mod	Str	L-N	L-N	Wil	12–132	50	4.0	D. Ful	Ful RV16	4	Own	Own	W	G	Own	Ros	B38x8.25	B38x8.25	Own	23	318	96	....
*White 50B	29	6494	.....	....	198°	Own GRB-1	4–4¼x5¾	Own	Zen	.....	L-N	Opt	12–132	.....	.....	P. Own	Own GRBB	4	Spi	Own 50B	S	B°	Own 50B	Own	P 34x7	DP34x7	Bud	33½	26	299	83
*White 50	21	6000	.....	....	180°	Own GRB-1	4–4¼x5¾	Own	Zen	.....	L-N	Opt	12–132	.....	.....	P. Own	Own GRBB	4	Spi	Own 53	S	B‡	Own 53	Own	B34x7.50	DB34x7.5	Bud	33½	26	281¼	84½
*White 54	29	7915	.....	....	227°	Own 1A	6–4¾x5¾	Own	Zen	L-N	L-N	Opt	12–112	.....	.....	P. Own	Own 1B	4	Spi	Own 54	S	G°	Own 54	Ros	B 38x9.0	DB38x9.0	Bud	46¾	24⅜	327	91
Yellow Coach Y	29	6750	13590	6840	225	Yell	6–3½x5½	Lon	Zen	N-E	N-E	Ves	12–100	...	.....	D. Lon	B-L	4	Spi	Tim	S	E	Tim	Ros	B 40x9.0	DB40x9 0	Bud	31½	25⅞	344	90
Yellow Coach Z	29	7550	12500	4950	200	Yell	6–4¼x5½	Lon	Zen	N-E	N-E	Ves	12–100	...	.....	D. Own	B-L	4	Spi	Tim	W	A	Tim	Ros	P 36x6	DP36x6	Bud	35½	26⅝	291	90
Yellow Coach Z	33	7380	12210	4830	230	Yel	6–4¼x5½	Lon	Zen	N-E	N-E	Ves	12–100	...	.....	D Own	B-L	4	Spi	Tim	W	E	Tim	Ros	P 36x7	DP38x7	Bud	.	.....	.....	.....
YellowCoach Z,Gas.Elec	33	9145	14110	4965	230	Yell	6–4¼x5½	Lon	Zen	N-E	N-E	Exi	6–285	...	.....	Non	Non	....	Spi	Tim	W	A	Tim	Ros	P 36x7	DP36x7	Bud	.	25	341	92½
YellowCoach Z,Gas.Elec	66	10350	17350	7000	230	Yell	6–4¼x5½	Lon	Zen	N-E	N-E	Exi	6–285	...	.....	Non	Non	....	Spi	Tim	W	A	Tim	Ros	S 34x7	DS34x7	Bud	.	23½	364	94

‡—Two

Electric Commercial Cars

Name and Mode Number	Total Weight Resting on Four Tires	Chassis Weight—Exclusive of Battery	Minimum Load Capacity	Maximum Load Capacity	Chassis Price	Maximum Speed	Location of Battery	Mileage Per Charge	Motor	Controller	Speeds Forward	Drive	Rear Axle	Spring	Front Tires	Rear Tires	Steering Gear	Wheelbase	Per Cent of Weight on Rear Wheels
O. B-B	.....	.....	.....	.....	.....	13	.....	.....	G-E	Own	....	C	D	.....	S 36x4	DS36x3½	Own	107	.....
O. B-C	.....	.....	.....	.....	.....	11	.....	.....	G-E	Own	....	C	D	.....	S 36x5	DS36x4	Own	135	.....
O. B-D	.....	.....	.....	.....	.....	10	.....	.....	G-E	Own	....	C	D	.....	S 36x6	DS36x5	Own	143	.....
Walker 10	.....	2400	.....	1500	1750	14	H&S	60	G-E	Own	4	S	Cla	Mat	S 32x3½‡	S 32x4‡	Ros	108°	66
Walker 20	.....	3200	1500	2000	2450	15	A	50	Wes	Own	5	Own	Own	Mat	S 34x3½	S 36x4	Ros	94°	66
Walker 25	.....	3500	2000	3000	2550	14	A	50	Wes	Own	5	Own	Own	Mat	S 34x4	S 36x5	Ros	101°	66
Walker 45	.....	4400	4000	5000	3300	14	A	50	Wes	Own	5	Own	Own	Mat	S 36x4	S 36x6	Ros	114°	66
Walker 50	.....	4800	5000	6000	3450	13	A	50	Wes	Own	5	Own	Own	Mat	S 36x5	S 36x8	Ros	126°	66
Walker 65	.....	7000	7000	9000	4350	11	A	50	G-E	Own	5	Own	Own	Mat	S 36x5	DS40x5	Ros	131°	66
Walker 75	.....	7800	10000	14000	4500	10	A	50	G-E	Own	5	Own	Own	Mat	S 36x6	DS40x6	Ros	141°	66
Ward B	6500	2300	.....	.....	.....	14	S	.....	*	Own	4	W	Own	Eat	P 30x5	P 30x5	Ros	91	.....
Ward C	8400	2850	.....	.....	.....	13	S	.....	*	Own	4	W	Own	Eat	P 30x5	P 32x6	Ros	96	.....
Ward E	13000	4100	.....	.....	.....	12½	A	.....	*	Own	4	W	Wis	Eat	S 34x5	S 36x7	Ros	114	.....
Ward G	17000	4950	.....	.....	.....	11	A	.....	*	Own	5	W	Wis	Eat	S 36x8	S 36x8	Ros	128	.....
Ward K	25000	7750	.....	.....	.....	10	A	.....	*	Own	5	W	Wis	Eat	S 36x6	S 36x10	Ros	160	.....
Ward KS	30000	8075	.....	.....	.....	9½	A	.....	*	Own	5	W	Wis	Eat	S 36x7	DS36x7	Ros	160	.....

NOTE: Battery Equipment on all above makes is at the option of the purchaser. Battery Location Abbreviations: A-amidships; H-under hood; and S-under seat. *G-E or Wes

KEY OF ABBREVIATIONS

For addresses of manufacturers listed below see Chilton Catalog and Directory

Wheelbase

*More than one wheelbase furnished.

Tires

B—Balloon.
P—Pneumatics standard equip.
DP—Dual pneumatics standard equipment.
S—Solids.
DS—Dual solids.
*—Tires at extra cost.
‡—Pneumatics can be furnished at extra cost.

Engine

*Models also furnished with engine under seat.
Bud—Buda Co.
Con—Continental M. Corp.
D—Head and Side.
FP—Full Pressure to all bearings including wrist pins.
H—Overhead.
HaS—American Car & Fdy. Co.
Her—Hercules Motor Corp.
I—In Head.
Jackson—Master M. T. Mfg. Co.
L—L-Head.
Lyc—Lycoming M. Corp.
PC—Pressure to all crankshaft and connecting-rod bearings.
PG—Pump, Gravity & Splash.
PS—Pressure with splash.
SP—Circulating splash.
T—T-Head.
Wau—Waukesha M. Co.
Wis—Wisconsin M. Mfg. Co.
Yell—Yellow Sleeve V. E. Wks.
X—Sleeve.

Governor

Dup—Eisemann Magneto Corp.
Han—Handy Gov. Co.
K. P.—Handy Gov. Co.
McC—E. R. Klemm.
Mon—Monarch Gov. Co.
Non—Not Supplied.
Pha—Bethlehem Fabricators, Inc.
Pie—Pierce Governor Co.
Sim—Eisemann Magneto Corp.
Wau—Waukesha M. Co.

Radiator

Bow—Bowerbank, E. R. Co.
Bus—Bush Mfg. Co.
Chi—Chicago Mfg. Co.
Fed—Fedders Mfg. Co.
G&O—G. & O. Mfg. Co.
Har—Harrison Rad. Corp.
Lon—Long Mfg. Co.
McC—McCord Rad. & Mfg. Co.
McK—McKinnon Dash Co.
Mod—Modine Mfg. Co.
Per—Perfex Corp.
R-T—Rome-Turney Rad. Co.
U. S.—U. S. Cartridge Co.
You—Young Rad. Co.

Fuel System

B.B.—Penberthy Injector Co.
Car—Carter Carburetor Co.
E—Electric Pump.
G—Gravity.
Mar—Marvel Carbureter Co.
O—Mechanical Pump.
P—Pressure.
Sch—Wheeler Schebler Car. Co.
Ste—Detroit Lubricator Co.
Str—Stromberg Motor Dev. Co.
Til—Tillotson Mfg. Co.
V—Vacuum.
Zen—Zenith-Detroit Corp.

Electrical Systems

‡—Generator & Starter at Extra Cost.
†—Starter not supplied, Generator at Extra Cost.
*—Starter at Extra Cost.
A-L—Electric Auto-Lite Corp.
Apo—Apollo Magneto Corp.
Bos-A—Am. Bosch Magneto Co.
Bos-R—Rob. Bosch Magneto Co.
Con.—Conn. Tel. & Elec. Co.
DJ—DeJon Elec. Corp.
D-R—Delco-Remy Co.
Dyn—Owen Dyneto Corp.
Eis—Eisemann Magneto Corp.
Exi—Electric S. B. Co.
Gor—R. J. Gorman Co., Inc.
L-N—Leece-Neville Co.
N-E—North East Elect. Co.
Non—Not Supplied.
Pol—Prest-O-Lite Co.
Sci—Scintilla Magneto Co.
Spl—Splitdorf Electrical Co.
USL—USL Battery Corp.
Ves—Vesta Battery Corp.
Wil—Willard S. B. Co.

Clutch and Gearset

*—Other ratios optional.
†—Auxiliary two-speed transmission optional.
A—Amidships.
B & B—Borg & Beck Co.
B-L—Brown-Lipe Gear Co.
Cot—Cotta Trans. Corp.
Cov—Covert Gear Co.
Det—A. J. Detlaff Co.
D-G—Detroit Gear & Mach. Co.
D—Disk.
Ful—Fuller & Sons Mfg. Co.
H-S—Merchant & Evans Co.
J—Unit with Jackshaft.
K—Cone.
Lon—Long Mfg. Co.
M. M.—Mechanics Mach. Co.
Mun—Muncie Products Div. General Motors Corp.
O—Disk in Oil.
P—Plate.
Roc—Rockford Drill. Mach. Co.
U—Unit with Engine.
W-G—Warner Gear Co.
Yell—Yellow Sleeve V. E. Wks.

Universal

B.G.—Universal Machine Co.
Blo—Blood Bros. Mach. Co.
Cle—Cleveland St. Prod. Corp.
Har—Spicer Mfg. Co.
M-E—Merchant & Evans Co.
M. M.—Mechanics Machine Co.
Pet—Cleveland Univ. Parts Co.
Pic—Pick Mfg. Co.
Spi—Spicer Mfg. Co.
The—Thermoid Rubber Co.
U-M—Universal Machine Co.
U-P—Universal Products Co.

Front and Rear Axles

*—Two speed.
½—Semi-Floating.
¾—Three-Quarter Floating.
B—Straight Bevel.
Cla—Clark Equip. Co.
Col—Columbia Axle Co.
Con—Continental Axle Co.
C—Chain.
D—Dead.
Eat—Eaton Axle Co.
F—Floating.
I—Internal Gear.
R—Double Reduction.
S—Spiral Bevel.
Sal—Salisbury Axle Co.
She—Sheldon Axle & Spring Co.
Shu—Shuler Axle Co., Inc.
Tim—Timken Det. Axle Co.
Tor—Eaton Axle & Spring Co.
W—Worm.
Wis—Wisconsin Parts Co.

Brake

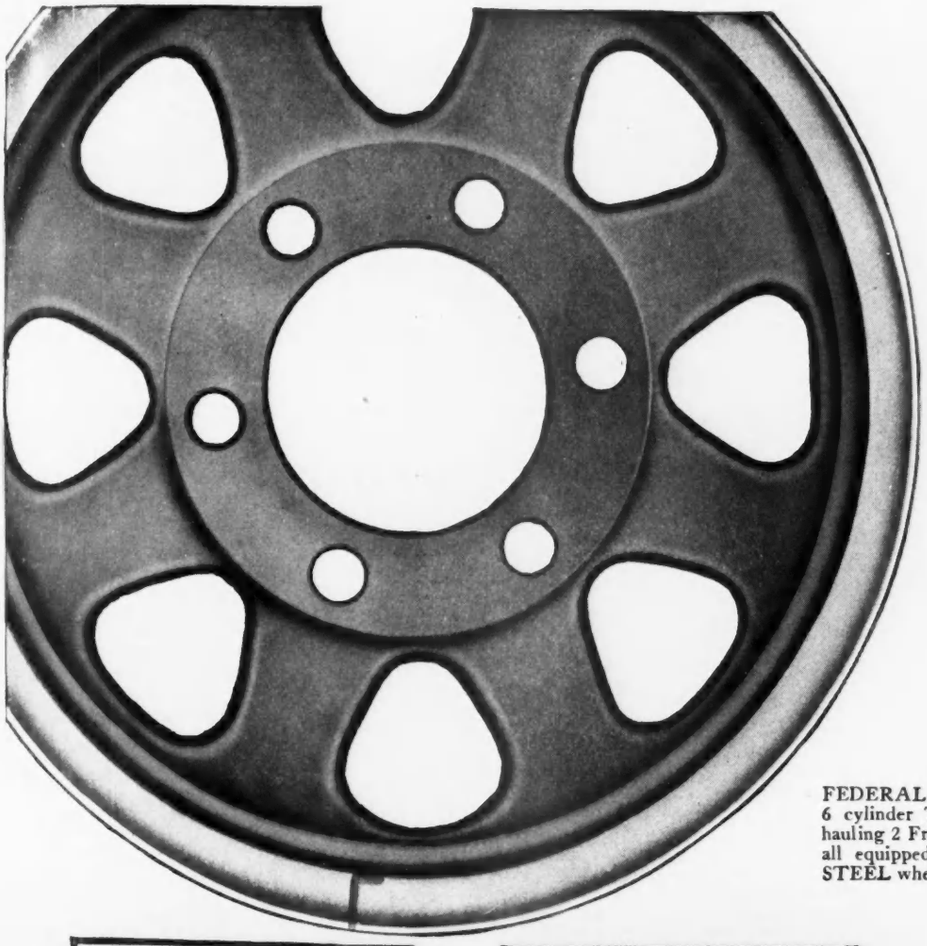
A—Rear Wheels only.
B—Driveshaft and Rear Wheels.
D—Jackshaft and Rear Wheels.
E—4-Wheel Brakes.
F—4-Wheel brakes with emergency on jackshaft.
G—4-wheel brakes with emergency on driveshaft.
H—4-wheel brakes with emergency on rear wheels.

Service Brake Type

*—Mechanical.
†—Hydraulic.
‡—Vacuum Booster.
°Compressed Air.

Steering Gear

CAS—Columbus G. & P. Co.
D-G—Detroit Gear & Mach. Co.
Dod—Dodge Bros. Co.
Gem—Gemmer Mfg. Co.
Han—Hannum Mfg. Co.
Jac—Saginaw Steering Gear, Div. General Motors Corp.
Lav—Hannum Mfg. Co.
Ros—Ross Gear & Tool Co.



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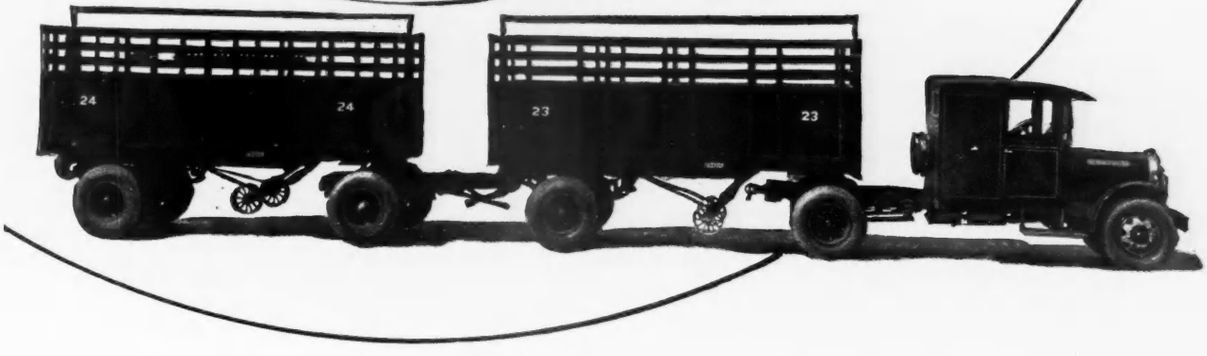

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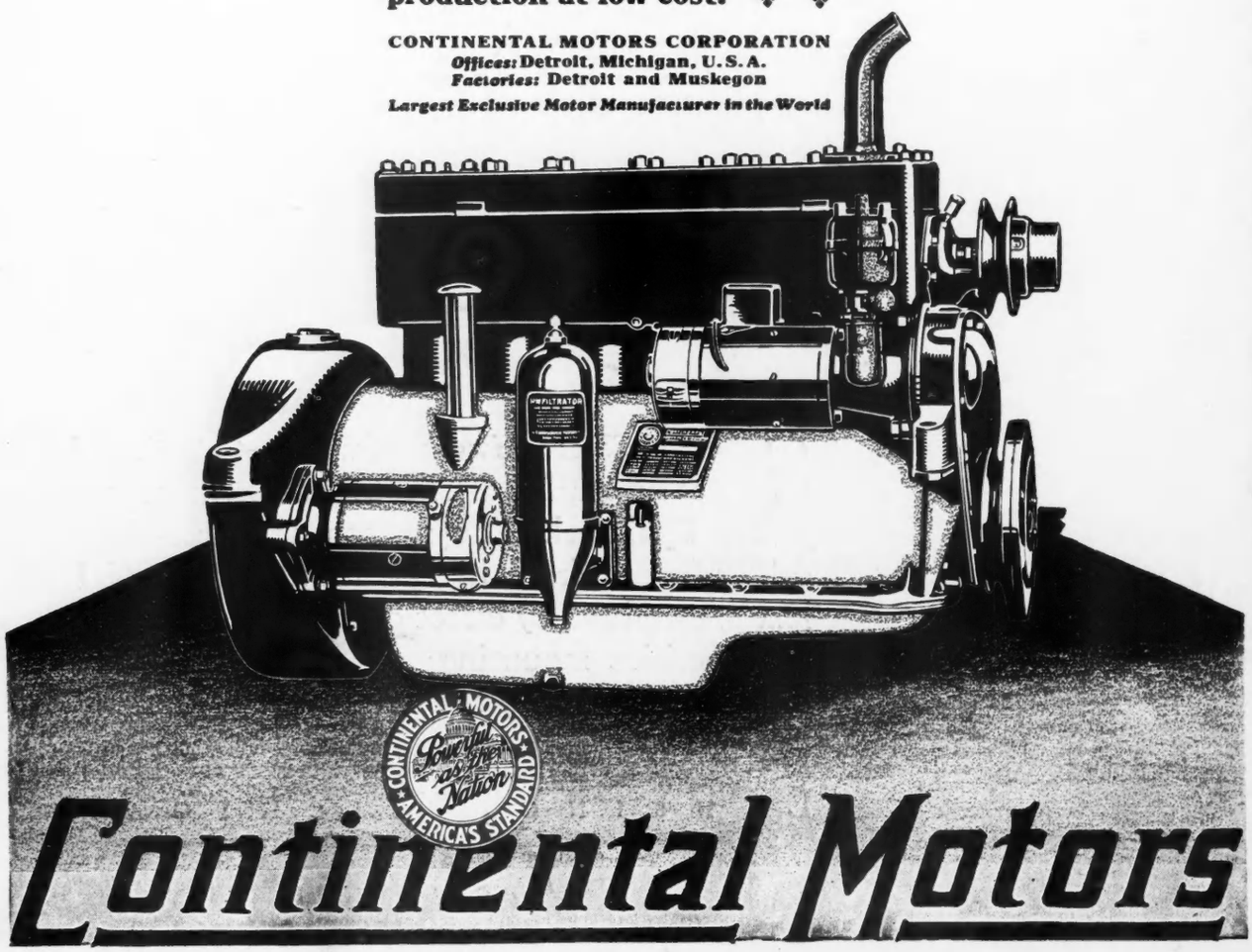

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